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## *The Folklore of Local School Control*

We have about fifty thousand school districts in this country, each one operating under the direction of a local school board, whose members, in most cases, have been elected by the people of the school district. With this network of local units overseeing education, the public schools seem to be the last stronghold of local control in this country. Indeed, compared to other countries, the decentralization of educational government in the United States is noteworthy.

I suggest, however, that a great many of us do not understand the realities of state and federal influences on public education. Some of us seem determined to ignore the facts as they are and to cherish a condition that has not existed for a century.

If policy decisions for education at local, state, and national levels are to be rational, we all need to see things as they are. Actually, current realities may be more in keeping with what our public policy for education ought to be than the prevailing fantasy is. A brief history of school control and a review of the present situation may be helpful in separating fact and fancy.

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Present-day local school government has two main progenitors. The small school district, characteristic of the West and the Midwest, stemmed from the type of settlements found in the New England town. The town, it will be recalled, included the village and the area immediately adjacent. To begin with, the town had one church and, in most cases, one school—a one-room school. When the town became too populous for the single church, a new town was formed and subsequently a new one-room school came into being.

These one-room schools, usually reading and writing schools, were governed for many years by the town selectmen. In other words, provisions for schools were made as provisions for roads, bridges, and other town needs were made. After about a century, presumably when school matters became a little more complex, the selectmen chose some of their members to serve as the school committee. This committee was the forerunner of the present school board, but another century passed before that body, as separate from the town selectmen, actually came into being.

When people from New England migrated into Ohio and states farther west, they established small local school districts modeled after the New England town. By this time, the concept of a separate board of school trustees, or school directors, had emerged. Northern states extending even to California were divided into thousands of tiny school districts, each with its own school board. Newly established cities had many separate school districts, often coterminous with political wards. In fact, the schools in these districts were sometimes called ward schools. In sparsely settled areas, a few sections of land were joined to form a school district that had no central town. Each district, to begin with, had a one-room school designed to provide the rudiments of an education.

For the second progenitor of local school government, we turn to the southern states. There, it will be recalled, the county became the principal unit of local government. Southern states were among the first to establish the office of county superintendent of schools and to evolve a county board of education. In ten southern states

the county became the basic administrative unit or school district. As people migrated westward, the county plan of government was transplanted, and at least two western states established the county as the basic school district. In many states, however, a combination of the county and the town arrangement evolved. Thus, the pattern of small school districts tended to persist, with school districts often subject to the nominal control of a county superintendent of schools or a county board of education.

Regardless of origin, provisions for public education clearly had their roots in local political action. Little wonder that the federal Constitution framed in 1787 made no mention of a function that was so localized and so meager. It took a Horace Mann in Massachusetts and a Henry Barnard in Connecticut, as late as the 1830's, to convince people that public arrangements for the education of all children ought to be provided. After the work of these and other reformers, the framers of state constitutions did have something to say about public education, as we shall note. The long tradition of localism in public education in this country, however, should not be overlooked.

But strong as the tradition of home rule is in the United States, home rule has always been practiced within the framework of a larger unit of government. Even in Colonial times, the general assembly or house of burgesses was seen as the chief law-making body of the colony, subject only to the veto power of the royal governor. The plenary power of the Colonial legislatures was carried over to the various state legislatures, and town and county governments were established within bounds set by these bodies.

This same development can be seen in school government. The first school laws of our country were passed by the Massachusetts Bay Colony in 1642 and 1647. In 1800 only seven of the sixteen state constitutions made specific reference to the obligation of the respective legislatures to establish and maintain a system of free public schools. By the time of the Civil War, however, some such provision was universal among the states. Thus, the beginnings of

state (or Colonial) requirements that local communities establish public schools date back three hundred years, and, for more than a century, we have had mandatory local operation of schools within the framework of state government.

Despite the silence of the Constitution on the subject, federal influences on public education are almost as old as state controls. As a matter of fact, federal influences predate the Constitution itself. The Ordinance of 1785 set aside federal lands to be used for school purposes. This law has been followed by much congressional action, including the Morrill Act of 1862, which established the land-grant colleges; the Smith-Hughes Act of 1917, which provided support for vocational education at the secondary-school level; the Lanham Act, of more recent years, which recognized federal responsibility for helping to provide educational facilities in areas affected by military installations and other federal projects; Public Laws 16, 346, and 550, which acknowledged federal responsibility for the education of veterans; and the National Defense Education Act of 1958, in which a total of almost 900 million dollars has been authorized for educational purposes.

The federal courts may have done even more than Congress has to create a national policy for public education. Spurlock (1) analyzed forty-five United States Supreme Court decisions, all of which have relevance for public education. Fifteen decisions dealt with the question of state or federal powers and functions. In 1819, in the Dartmouth College case (2), for example, the Court held that a charter granted to a private college is in the nature of a contract and cannot be revoked by a state legislature without the consent of the college.

Fifteen other cases dealt with interpretations of the First Amendment. As an example we may cite the case of *Hamilton v. Regents of the University of California* (3). In ruling on that case in 1934, the Court held that, although the religious beliefs of a student were protected by due process of law, he was not compelled to attend the

university. Thus he could claim no constitutional right for not complying with the requirement to take military training.

Still another fifteen cases interpreted the meaning of the Fifth and Fourteenth Amendments. Ten of the cases dealt with questions on equal treatment of the races. In 1950, in *Sweatt v. Painter* (4), the Court held that a separate law school for Texas Negroes did not afford them equal opportunities. The Court required the University of Texas to admit a qualified Negro.

The time when the decisions were made deserves attention. In the first 136 years of the life of the Court, eighteen decisions that had direct bearing on education were handed down. From 1926 through 1954, twenty-seven decisions affecting education were made. Thus, the Court, a federal body, seems to be affecting educational policy and practice increasingly over the nation at large. This point will be amplified later.

As we assess the background of the problem, we note a long tradition of localism in school control. But over much of our history, and certainly over the entire period of public education in the sense of mandatory tax support and compulsory pupil attendance, we find education defined as a state function and subject to many federal influences. Apparently, our familiarity with the local operation of public education has made it easy to forget state and federal impingements on public education. Some citizens deeply resent any step that shatters the delusion of local control. State enforcement of minimum curriculum requirements within a school district or federal court action bearing on such matters as religious education can trigger strong reaction.

It seems high time that school control be stripped of its folklore and examined for what it is and what it ought to be. Actually, local school operation is constantly subjected to state supervision and often affected by federal policy. While some state and federal controls are relatively easy to see, other controls, particularly at the federal level, are blurred in what seems to be a fantasy.

As we have already noted, every state constitution contains definitive language on the obligation of the state to establish and support a system of free public education. On the strength of these provisions, state legislatures, for more than a century, enacted an almost forbidding body of school law. This law prescribes the organization of school districts in the state, gives powers and responsibilities to local school-board members, sets up the framework within which monies are to be raised and expended, provides directly or indirectly for the certification of teachers, and often names school subjects to be taught. Little wonder that the state legislature has been called the big school board. Legislatures have been especially active in establishing fiscal policies within which local districts must operate. One study showed that twenty-seven of the forty-eight states had established, by legislative action, limits beyond which local school taxes might not go, even with the affirmative vote of the people in the local district.

State control over public education is also exercised through state departments of education. At first, arrangements were simple. The department was headed by a state superintendent of public instruction. He was usually publicly elected and carried out his responsibilities with the help of a small staff. But times have changed. Today all but four states have a state board of education intrusted with the general supervision of the elementary and secondary schools, and sometimes certain public colleges. More and more, these boards are employing a chief executive or state superintendent and a staff of professional assistants. In New York State, the staff numbers more than six hundred. Other populous states have state departments of education that are almost as large.

These state departments operate in many areas. State monies for public education are usually distributed to the school districts by the state departments. Often this arrangement involves the setting of standards and the making of interpretations as charged by the legislature. Teacher certification, frequently governed by administrative regulations in response to statutory enactments, has come

to be almost entirely a function of state departments. When legislatures get modest with respect to curriculum-making for the public schools, they usually give the state department of education a charge to set up curriculum standards for the state. While many state departments try to enforce only minimum standards and to stimulate local action beyond the minimum, there is no gainsaying the fact that local school districts are subject to many state department controls.

Should anyone challenge the control of state legislatures and state departments of education, the state courts make the matter abundantly clear. Again and again, state courts have ruled as the Supreme Court of Indiana did:

Essentially and intrinsically, the schools in which are educated and trained the children who are to become the rulers of the commonwealth are matters of State, and not of local, jurisdiction. In such matters the State is the unit, and the Legislature the source of power. The authority over schools and school affairs is not necessarily a distributive one, to be exercised by local instrumentalities; but, on the contrary, it is a central power, residing in the Legislature of the State. It is for the law-making power to determine whether the authority shall be exercised by a State board of education, or distributed to county, township, or city organizations throughout the State. . . [5].

State control over public education is thus provided by constitutional mandate, specified in a large body of statutory law, often implemented administratively by a state department of education, and reinforced, if people become forgetful, by the state courts. Within this framework, to be sure, local operation is provided and local initiative is often encouraged.

We have already referred to federal influences on public education in the early history of this country. The more recent picture deserves elaboration. In 1950, Hollis P. Allen reported the facts in detail (6). Although there was a U. S. Office of Education in the year that Allen wrote his book, more than twenty units of the federal government were at that time also conducting bona fide educational programs. These federal units included the Department of Agriculture with its own "public" schools at Oak Ridge and Los Alamos, the

Department of the Interior with its Indian education program, the National Military Establishment with its Reserve Officers Training Program in schools and colleges, the Department of State with its allocation to UNESCO, and the Veterans Administration with its aid to our ex-GI's. Actually, in 1949 only one per cent of the federal expenditures for educational institutions and students attending them was dispersed by the Office of Education. We suspect that dispersion of educational functions among more than a score of agencies, most of which do not have the word *education* in their name, helps congressmen preserve the delusion that the federal government does not interfere with the sacred rights of states and local communities to control our great public school system.

Nor do we see any tendency to change matters. When Congress established the National Science Foundation in 1950, the Foundation was directed, among other things "to develop and encourage the pursuit of a national policy for the promotion of basic research and *education* (7) in the sciences." This action may have been wise, but the fact remains that a new educational agency was thereby established by the federal government under the guise of another name.

Activities of the Foundation provide ample evidence of its effectiveness as an educational organization. Its own seventh annual report devotes a major section to "training and education in the sciences." There we learn that in 1957 some 1,000 predoctoral and postdoctoral fellowships were granted to science students; 96 summer institutes were supported for 5,300 high-school and junior-college teachers of science and mathematics; and 16 academic-year institutes were supported for 775 more high-school teachers. We learn, too, that a nationwide curriculum-building program in science and mathematics has been launched, the most notable venture thus far being the development of a new high-school physics course at the Massachusetts Institute of Technology.

Congressional appropriations for the National Science Foundation amounted to 225 thousand dollars in 1951 and 40 million dollars in

1957. To be sure, not all these funds could be charged off to the educational activities of the Foundation. Even so, its educational program seems to command the strongest kind of backing. On January 27, 1958, President Eisenhower, in his message to Congress, recommended a fivefold increase in appropriations for the science-education activities of the Foundation.

But in presenting his message to Congress the President had to make full use of the folklore of local school control. Only because we were in an "emergency" could the federal government seem justified in calling for the strengthening of teaching, in providing scholarships and loans for able students, and increasing the supply of college teachers. Even this argument was lost on such a staunch champion of the folklore as Senator Jenner. When the bill growing out of the President's recommendation was passed in the Senate, Senator Jenner insisted that scholarships and loans be denied students in Indiana.

In spite of the avowed intent of the executive and the legislative branches of the federal government not to control education, acts of Congress that provide specific rather than general educational assistance have resulted in controls. The Morrill Act helped establish land-grant colleges, not other kinds of colleges; federal aid for vocational education helped determine the curriculum of many high schools; the GI Bills had far-reaching effects on schools and colleges; and appropriations to the National Science Foundation are now helping shape curriculums and establish prestige for certain teachers. And in spite of the language of the National Defense Education Act of 1958 forbidding federal control, control there will be, for certain kinds of education, not other kinds, are being supported. All these results may be commendable, but they should be recognized for what they are: elements of federal control over education.

The current scene cannot be viewed in terms of congressional action only: the United States Supreme Court, as suggested earlier, has become a potent federal influence. It is the Court that has stipulated that private schools cannot be abolished by act of a state

legislature (8), that states may provide free textbooks (9) and free transportation (10) to students in private and parochial schools, that under certain conditions a program of released time for religious education (11) is not in conflict with the First Amendment, and that a state legislature may require that the public school teachers of the state not be members of any organization advocating overthrow of the government (12). And it is the Court, as we are well aware, that reversed its own ruling of the "separate but equal" doctrine given in the railroad case of *Plessy v. Ferguson* (13) in 1896 and declared in 1954 that segregation by race in the public schools is a violation of the Fourteenth Amendment (14). A year later the Court pronounced its "with all deliberate speed" doctrine, and federal court action versus local compliance has been headline news ever since.

Despite Little Rock and other unfortunate incidents, the language of the segregation decision does much to establish a national policy for public education. Note the following:

Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship. Today it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment [14].

We noted earlier that local operation of schools sometimes obscures the fact that states establish the framework within which that operation is circumscribed. The thrust of federal influence is still more difficult to see, especially if the viewer does not wish to look. Even though the basis for federal activity in education must be found chiefly in the general welfare clause of the Constitution and in the First, Fifth, and Fourteenth Amendments, federal influences exerted by Congress and the Supreme Court mark our entire history. With the recognition that education is related to our national well-being, even to our security as a nation, it seems imperative to look squarely at the federal interest in education for what it is.

It is certainly easier to describe school control as it has been and as it is now than to prescribe for the future. Nevertheless, it seems necessary to suggest briefly some implications as I see them.

First, there is a great need for citizens of this nation to view control of education as it is today—not as it may have been a century ago or as we might wish it to be. It should be quite clear that, for more than a century, states have been exercising an increasing amount of jurisdiction over school operation. This mounting control can be noted in the movement to reorganize school districts, in the development of programs for state support for schools, in the centralization of teacher certification, to mention a few signs. In short, the states now seem to be taking more seriously what has long been their legal responsibility.

It is equally important that we recognize the federal interest in education and the ways by which the federal government has sought to protect that interest. President Eisenhower pressed this point in his message to Congress, as we noted earlier. But the proposal was more than an "emergency" measure, as the President characterized it. Selective Service rejections for educational deficiencies during and since World War II suggest the nature of the problem for war and peace. In 1955 these rejections amounted to 1 to 2 per cent of all draftees from Minnesota, Iowa, Montana, and Washington; and 40 to 45 per cent of all draftees from Alabama, Mississippi, and North Carolina (15). Perhaps even more significant are performance reports on the Tests of General Educational Development as reported by Bloom (16). He found that the median high-school senior in the top state stood at the sixty-fifth percentile of the national distribution, whereas the median high-school senior in the lowest state was at the thirty-first percentile of the national distribution.

This realistic view ought to strip away the folklore and hasten constructive action.

Second, a realistic partnership of local, state, and federal governments ought to be established for the control and operation of schools. Responsibility for operation of schools, as far as possible, ought to be retained at the local level. In spite of much improvement in

school-district organization, effective local operation calls for further reorganization, particularly in several midwestern states, to provide an adequate base for local planning, operation, and financial support. In districts too small or too poor to provide even a minimum program, local decisions about schools are a farce.

State control of education should continue to be marked by broad delegation of responsibility to local school districts to operate the schools and by measures to insure a minimum educational program in all school districts of the state. In many states guarantee of a minimum program will require more careful definition of that program and more state money to support it. Many states, too, ought to go beyond their regulatory role and exert leadership in helping school districts conceive and implement programs that go beyond the minimum established.

Federal influence, for the most part, ought to consist of participation in the school enterprise. If science instruction needs a boost, the federal government should be able to give help without apology. If the talent search demands scholarships and loans, the federal government might well provide at least some of the money necessary to make such a program effective. At the same time, it should be clearly recognized that the federal government cannot be a silent partner; some federal control is inevitable and even desirable. The federal government cannot be expected to supply funds to foster the national well-being without at least ascertaining that such funds are being expended for their legitimate purpose. Moreover, in spite of current frustration with progress in desegregation, we cannot just forget that the United States Supreme Court is bound by the Fourteenth Amendment to see that the right of any citizen is not abridged by any state government.

Third, federal policy on education should be clarified and enunciated. The educational program of the federal government is dispersed among more than a score of agencies. Many aspects of the program are not recognized as educational. Whether or not all educational programs can be placed in the Office of Education is an

open question, but somehow a complete picture of federal activities in education should be put together to help us see what is going on, where inconsistencies exist, and where new plans are needed. Someone or some group must be given over-all responsibility for this task. At present the left hand does not know what the right hand is doing.

When an over-all view begins to emerge, the national interest in education should be stipulated, not as an emergency, but as a continuing concern. The federal government will need to make resources available to insure that the national interest will be served. In so doing, some elements of control will have to be exercised. Again, the solution is not federal control or local control, but a thoughtfully developed partnership that ascribes to each level of government the controls which it can manage best in terms of the larger interest.

The National Defense Education Act of 1958 and current efforts to implement its provisions for student loans, fellowships, guidance institutes, language programs, and other activities give new urgency to the need for clarification of federal policy on education. Many questions are being debated: Does the administration of the Act place the Office of Education and the National Science Foundation in competition? Should the Office of Education work through state departments, colleges, and universities; or through regional offices as the Veterans Administration does? Should reimbursed programs emphasize local initiative or federal prescription? Will available money induce colleges and universities to do what they ought not do? Are the provisions that require students who are given loans and fellowships to take an oath extraneous and undesirable? When the Act expires four years hence, what next? These are policy questions that demand joint consideration at local, state, and federal levels of government.

There is no denying the fact that we operate under state and federal governments. Nor is there any question about the precedence of one over the other. When the national interest is at stake or the rights of citizens are threatened, federal law takes precedence. This

position was clarified as early as 1816 in the case of *Martin v. Hunter's Lessee* (17). In that case, Justice Story asserted that a declaration of constitutionality by the United States Supreme Court overrides any declaration of unconstitutionality made by a state court. Interposition and nullification are old doctrines, long discredited despite their recent re-emergence.

Fourth, the federal government should make substantial contributions to the financing of public education. Several arguments support this position. The first is the implementation of the national interest. For example, in our society a literate population is a necessity. Draft figures and GED test results show that some states still do poorly with this task. The federal government should give the literacy program a boost in those states or underwrite a minimum program in all states. Whichever is done, some controls will have to be exercised.

Mobility of population also argues for federal participation in financing. For illustration, the migration of large numbers of rural people from the southern states to the urban centers of the North is a concern that extends beyond the states and localities who receive these new residents. For our national well-being and for the welfare of individual migrants, including their employability, their educational opportunities before and after migration should be enhanced.

Then, too, the federal government is the chief tax collector. Some 75 per cent of all local, state, and federal taxes are poured into federal coffers. To be sure, much of this money must go for defense purposes. At the same time, liberal appropriations have gone for highway construction and other domestic purposes. To deny federal funds for education, particularly in the years ahead when school and college enrolments are to be swelled as never before, inevitably means discrimination against a necessary public service.

Finally, we ought to continue to scrutinize the partnership established by local, state, and federal governments. This examination needs to be factual, not a perpetuation of our folklore. For instance, it seems fairly clear that the federal government is not just big, im-

personal, and wasteful. Actually, the spotlight of public opinion may shine with greater intensity on federal government than it does on most local and state governments. As an example, we might note the publicity given the Senate committee investigations of infiltration of gangsters into labor unions.

Moreover, it does not always follow that allocation of federal money becomes the excuse for creating a larger and larger bureaucracy which tends to grow in its estimation of its own importance. For decades the Office of Education has administered the aid program to the land-grant colleges and universities with little fuss, minimum control, and a skeleton staff. While Parkinson's law on the growth of bureaucracy tends to operate in organizations, it does not seem to be inevitable.

It is quite clear that the public schools of this country have always operated within a framework established by the various states and that federal influences of some kind have always been prevalent. In recent decades, state controls over schools have been strengthened and federal activities in education, widely dispersed among many agencies, have multiplied. Federal influence has been piecemeal, haphazard, perhaps even surreptitious and often clothed in pious affirmation of state and local control. But inevitably the national stake in education and the growing social and economic interdependence of the nation have required congressional action and United States Supreme Court interpretation on educational questions. The time seems ripe for a realistic view of circumstances as they are and the forging of an honest local-state-federal partnership in education.

#### NOTES

1. Clark Spurlock, *Education and the Supreme Court* (Urbana: University of Illinois Press, 1955).
2. *Trustees of Dartmouth College v. Woodward*, 4 Wheat. 518 (U.S. 1819).
3. *Hamilton v. Regents of the University of California*, 293 U.S. 245 (1934).
4. *Sweatt v. Painter*, 339 U.S. 629 (1950).
5. *State v. Haworth*, 23 N.E. 946 (Ind.).

6. Hollis P. Allen, *The Federal Government and Education* (New York: McGraw-Hill Book Co., 1950).

7. *Italics mine.*

8. *Pierce v. Society of Sisters*, 268 U.S. 510 (1925).

9. *Cochran v. Louisiana*, 281 U.S. 370 (1930).

10. *Everson v. Board of Education*, 330 U.S. 1 (1947).

11. *Zorach v. Clauson*, 343 U.S. 306 (1952).

12. *Adler v. Board of Education*, 342 U.S. 485 (1952).

13. *Plessy v. Ferguson*, 163 U.S. 537 (1896).

14. *Brown v. Board of Education*, 347 U.S. 483 (1954).

15. *Ranking of the States* (Washington: Research Division, National Education Association, 1957), p. 6.

16. B. S. Bloom, "The 1955 Normative Study of the Tests of General Educational Development," *School Review*, LXIV (March, 1956), 110-24.

17. *Martin v. Hunter's Lessee*, 1 Wheat. (14 U.S.) 304.

## *The Response of the Schools to the Challenges of the Twentieth Century*

In *Study of History*, Arnold J. Toynbee presents history as the effort of human societies to adapt to changes in their environments. Often the society that adjusts successfully to one challenge is by that very fact inhibited from responding effectively to challenges of a different sort. This idea offers an all-too-tempting explanation of the present plight of the schools in Western societies and democratic states—tempting because it can so readily become infused with the fatalism that accepts defeat if only it can be coated with self-justification.

The harsh and straightforward biological edict of “adapt or die” is better calculated to call forth the necessary energies of a successful response to the many-faced challenge of the present age, provided the emphasis is heavily on *adapt* and the adaptation is a well-considered one that insures the perpetuation of those characteristics most likely to contribute to a wiser and nobler race of men.

The logic of the foregoing leads to a three-pronged question on society in general and the schools in particular. Adapt to what? For what purposes? How? The logic is acknowledged, but this article is neither the beginning nor the end of the inquiry. Rather it is a footnote intended to focus attention on current progress toward, and prospects for, a successful adaptation of the schools to newly defined needs.

An analysis of the new needs to which education must adapt has been attempted elsewhere (1) by me and by others better qualified.

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I shall content myself, therefore, with a few excerpts that lay bare with admirable incisiveness the nature of the needs. The excerpts are taken from the recent Rockefeller Report on education.

With regard to manpower, the Report concludes that the problem is not so much "the specific shortages which occur from time to time." Rather: "It is the constant pressure of an ever more complex society against the total creative capacity of its people" (2: 10). This sentence should be engraved in the minds of all who dare give themselves to the task of remaking the schools. The meaning is elaborated:

We must never forget that the advances of science and technology have been paralleled by the increasing complexity of social organization. It is in the nature of a complex society that it depends simultaneously on the imaginative fulfillment of a multitude of tasks. A handful of scientists seem to bear a disproportionate share of the burden today, a handful of diplomats may be called upon tomorrow, and the next day an equally small number of doctors, teachers, political leaders. Our society is ever more interdependent, and with this fact has come a need for highly trained men and women in many fields.

Thus a society depends on achievement at many levels. Whether it is the general capabilities needed to man our industrial apparatus, or the more highly trained abilities required to staff the specialized functions of our society, or the supremely important achievements of creative thought, the need is for an unprecedented degree of individual effort and accomplishment. Not only must we have wise leadership in all areas of our national life, cultural as well as political, ethical as well as technological; not only must we have competent people in a wide range of key professions: but underlying it all we must also have an informed citizenry. Among the tasks that have increased most frighteningly in complexity is the task of the ordinary citizen who wishes to discharge his civic responsibilities intelligently [2: 11].

In even broader perspective the Report states with an eloquence derived from the clarity of the perception:

The heart of the matter is that we are moving with headlong speed into a new phase in man's long struggle to control his environment, a phase beside which the industrial revolution may appear a modest alteration of human affairs. Nuclear energy, exploration of outer space, revolutionary studies of brain functioning, important new work on the living cell—all point to changes in our lives so startling as to test to the utmost our adaptive capacities, our stability and our wisdom [2: 28].

The excerpts from the Rockefeller Report emphasize my conviction concerning the nature of the present challenge to education. That challenge is to develop the capacities of all individuals in all groups, with attention to the widest possible variety of talents, but with special emphasis on the cultivation of judgment, the ability to think, and the higher sensibilities of man. For American schools, the edict says, in effect: Find ways of achieving what you have long professed, namely, the development of the full potential of each child. For many European countries, the challenge is to find ways of doing for the total population what is now being done so well for the 10 to 20 per cent of those with theoretical inclinations and bookish interests.

During the past two years, I have gone into many countries looking for answers to the problem of how to provide for the full development of those who are highly endowed with what we have been pleased to call abstract intelligence and of those whose abilities lie so far in other directions as to sometimes seem non-existent. My quest certainly has not produced any definitive answer. As far as I am able to observe, all existing programs are weighted toward certain types of abilities and learning objectives at the expense of other kinds of abilities and objectives. No existing school system is doing the whole job to the satisfaction of the thoughtful educational leaders in the country concerned. Depending on your temperament, you may be relieved or disturbed to know that in many European countries criticism of education is as sharp as it is in the United States.

While it is disappointing not to find more answers to the problems that confront us, it is reassuring to learn that the same questions are being raised by thoughtful men in all lands. It is also reassuring to note the emergence of broad areas of agreement. Perhaps I may be reading my own convictions into the conversations that I have had with professors in the universities, ministers of education, school inspectors, headmasters, teachers, and a few political leaders; but if we start with the proposition that a twentieth-century society has need

for full development of the capacities of all its citizens, the following corollaries find support in current knowledge of human behavior and learning:

Both the quantity and quality of education must be extended for all groups of the population.

After mastery of the elementary skills of speaking, reading, and writing the native language and the use of numbers, the full development of individuals requires differentiation of experiences to take into account varying capacities, diverse career choices, and other factors, such as personality structure and motivation for learning.

The schools in all countries have underestimated the learning capacity of individuals and often of groups.

Justice to the groups now neglected must be sought without sacrificing the quality of the education provided for groups that are now favored.

If the necessary improvements are to be accomplished, changes in organization and financial support must be accompanied by a more careful selection and use of teachers and by imaginative experimentation within the schools.

While no national educational system is close to the answer as to how best to organize and staff schools in order to achieve the ends desired, a number of schools for brief periods at least have demonstrated the possibility of putting high achievement within the reach of children and young people with a wide range of abilities and interests. Among the better examples, it seems to me, are a few high schools in Canada and the United States with superbly stimulating leadership and staffs of teachers devoted to discovering and developing the capacities of all individuals reached by the school; some of the newer comprehensive schools in England and one or two of the secondary modern schools; some of the comprehensive schools for the seventh, eighth, and ninth school years in Sweden; and such experimental schools as the Schuldorf Bergstrasse, near Darmstadt, Germany, the Atatürk Girls' Lycée in Istanbul, Turkey, and the com-

mercial gymnasium in Oslo, Norway. These schools are all experimental in nature; all sustained by the conviction that the effectiveness of learning can be increased; all characterized by unusual zeal and enthusiasm on the part of both staff and students; all places where a sense of achievement, actual or imminent, pervades the atmosphere and where the energies of teachers and students are released to an uncommon extent.

We have here, it seems to me, a clue to the conditions under which needed reforms can occur. The promise of improvement in education would brighten considerably if, instead of a few dozen experimental schools, we had several hundred. I see no reason why this could not happen.

Even in the midst of our fears and confusions, we are aware that ours is a period that may have in it the seeds of a new flowering of the human spirit. A glance through the pages of history shows that, time and again, man's creative imagination becomes most active when he is confronted with the realization that only a radical transformation of his ways can save him from disaster. In such a period, education, directed by creative minds, can become a powerful instrument for man's advancement.

In education, we face great policy decisions. The first great decision is concerned with the ends of education. There are signs that our present conflict and confusion may be resolvable by renewed efforts to build a society in which the full potentials of the individual are realizable. Our concern then will be not with turning out the "organization man," the socially adaptable man, the technically proficient man, or even the scientific man, but the man who has acquired control over his own powers and the ability to use those powers for the common good. In a society that is based on the worth of the individual, the possibilities for such development must be open on equitable terms to all; but the attainment of the goal will require the application of rigorous standards to the choice of aims, the selection of the content of learning, the pursuit of knowledge, and the evaluation of achievement. Only thus may we move along the road to an education which,

in the words of Everett Dean Martin, will serve "to free the mind from servitude and herd opinion, to train habits of judgment and of appreciation of value, to carry on the struggle for human excellence in our day and generation, to temper passion with wisdom, to dispel prejudice by better knowledge of self, to enlist all men, in the measure that they have capacity for it, in the achievement of civilization" (3).

The second great decision has to do with the expectations that society has for its young people. It is an ironic commentary on American traditions that a totalitarian society, which by definition places a low value on the individual man, should be setting higher expectations for young people than we are. There is a strong tendency now to blame the schools for the low expectations they have held for youth, and the schools are not entirely guiltless in this respect. We need to remember, however, that the American people, emerging from a frontier society into what seemed like a materialistic paradise, often identified the "good" life with the "easy" life, and it was the easy life that we wanted for children. We failed to realize that the schools cannot confer knowledge or wisdom, but only make their pursuit possible. We who believe in the great undeveloped potentialities of man and hold that the unfolding of those great potentials is the highest aim of society must not continue to underestimate the capacity of our children. Our young people are not less capable than the youth of the Soviet Union. Our children too can master the intricacies of mathematics and the scientific method. Our children, too, can learn to think in a foreign language. Not only can our students who are endowed with high ability accomplish far more than our schools typically expect, but many of lesser ability will achieve magnificently when the goal is worth the effort.

The third great decision has to do with the place of the teacher in our society. One of the most needed developments in educational administration is to define the professional freedom and the responsibility of the teacher. The quality of education cannot rise above the character and competence of those who teach. We shall be able to attract large numbers of highly qualified men and women to

teaching when we provide for the teacher and his learners essentially the same kind of professional responsibility that the physician has for the care of his patients. This view calls for changes in the administration of our schools and for better understanding on the part of citizens of the importance of the teacher's role in our society.

We must value teaching enough to make it attractive to creative minds; we must help those who are preparing for teaching to acquire a depth of scholarship that will enable them to guide the explorations of the immature into the riches of the cultural heritage; we must relieve teachers of the burden of clerical, custodial, and police functions so they may be free to teach; and we must use and reward the unique talents of gifted teachers.

The fourth decision has to do with the allocation of resources to education. Criticism of the schools may help to demolish false notions and bad practices; redefinition of the aims of education may help to give the schools a set of priorities that will make their task more manageable; but, if any nation really desires a quality education instead of a shoddy, mass-produced product, it must allocate to its schools and higher institutions of learning the resources necessary for the task.

The primary resource, and that in shortest supply, is creative intelligence. We shall not get the desired results in education unless we are willing to do what the Russians are doing, namely, to find ways of channeling a large number of the most gifted and highly trained young people into teaching. In a free society, this can be accomplished only by providing the kinds of rewards, including monetary rewards, that are valued in the society and by arranging for the occupation to be followed under conditions that offer the prospect of high achievement and recognition.

The present age is beginning to find voice for its too long neglected need for an education transcending in scope and quality any yet prescribed for any people anywhere at any time. The perception of the need has been tardy and the response partial and halting

everywhere—in every nation, not excepting the Soviet Union—and in every group from schoolmen to statesmen. Can we make the necessary improvements in education fast enough to prevent man from pulling down the temple of progress on his own head? An affirmative answer cannot be won unless education is given top priority—not below national defense, expansion of productivity, higher living standards, achievement of equal rights, and the pursuit of peace, but among the very first in order of emphasis, as an essential condition to the achievement of all other worthy social objectives. Moreover, educators in universities, colleges, secondary and elementary schools must stop wasting energy defending the status quo and use imagination and research to reveal and test new approaches to grouping learners, organizing curriculums and schools, and preparing and utilizing teachers.

The next twenty years, I believe, will bring changes in education of such a nature as to deserve the title “the quality revolution in education.” This revolution will be brought about by:

Renewed emphasis on intellectual development as a primary task of the schools.

A rigorous selection of content with a view to developing the learner's powers through exposure to the most vital and invigorating concepts developed by leading thinkers in major areas of human knowledge.

Making teaching attractive to a considerable number of the most cultivated and creative minds in our society.

The development of a unified program through which adequate revenues may be allocated to education under conditions that assure local control within limits compatible with national safety.

We need not despair. Social conditions for a marked advance in education are present. I am confident that the states and nations that make the necessary effort to develop a truly effective educational program for all children, young people, and adults will, within twenty years, be the most prosperous, the most invincible, and the most secure. These nations will be the greatest leaders of thought and action throughout the world. In a free society, the program of education must be suited to the responsibilities that citizens should assume under a democratic government where individual choice and

free enterprise prevail. Furthermore, that program must be based on the best available knowledge of how learning takes place and how desirable social change is produced.

To bring practices in the schools in line with the demands of our times and the current state of knowledge about learning will add to the cost of maintaining the schools, but thoughtful citizens will be willing to pay the price if they are assured a quality product.

#### NOTES

1. Francis S. Chase, *Education Faces New Demands* (Pittsburgh: University of Pittsburgh Press, 1956).
2. Rockefeller Brothers Fund, *The Pursuit of Excellence* (Panel Report V [Garden City, New York: Doubleday & Co., 1958]).
3. Quoted in Charles A. Beard (ed.), *Whither Mankind* (New York: Longmans, Green & Co., 1928), p. 360.

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## *Educational Dilemmas in the USSR*

"It is not what separates the Soviet Union and the United States that should frighten us Europeans, but on the contrary what they have in common. Their ideological oppositions are perhaps less to be feared . . . than their agreement regarding the scale of human values. These two technocracies which think of themselves as adversaries are dragging humanity in the same direction of 'dehumanization'" (1). Americans are not pleased by Mauriac's blunt opinion, yet his view is widely shared even by Europeans who are friendly to Americans. Indeed, this judgment was foreshadowed a century ago by de Tocqueville.

The contrasts and similarities in Soviet and American education reflect basic dilemmas that face all Western nations. The likenesses in the educational systems of the two nations show the influence of their surging industrialization within wide boundaries, a pragmatic orientation of education, and Soviet imitation of our schools. The differences are by no means wholly attributable to Bolshevik-Marxian philosophy. The Soviets have preserved many Continental concepts, such as separate educational streams. At the same time, the Soviets carry specialization and a pragmatic orientation to extremes not found anywhere else in the world.

Recently the main Soviet system of secondary schools has been moving toward ours. The move in our direction came at the very

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time that many critics of American schools were demanding that we copy precisely those features of Soviet education that were being played down in Russia. Only a few years ago our teachers were accused of spreading foreign ideas among our youth. Now the critics demand that we copy wholesale so that our teachers may save America from the Soviet menace.

Is the superiority of Russian education—much dramatized by Sputnik—a mirage? How great a part do schools play in scientific developments? We produced the atomic bomb at a time when critics were lamenting the supposed deterioration of our schools. The bomb was created by a few scientists with unlimited resources, though the craftsmen who produced the delicate instruments were no less essential. The quality of our schools may have been irrelevant to this feat. Similarly, Sputnik proves little about the general quality of Soviet schools. After all, it is reported that the world's first textbook on aeronautics was published in Russia before World War I. Many senior Soviet scientists studied in universities of czarist pattern or in the West during the 1920's and 1930's.

Most of the widely discussed features of Soviet schools are simplified pictures, lifted from context. Both admirers and detractors of Soviet education often look at an imaginary society. It is the complexity of Soviet education that I shall emphasize here.

The Soviet system, like ours, is spotty. For example, their rural schools are inferior to urban ones. Most children receive far less than the advertised amount of schooling, and most of them follow a narrow curriculum. At the same time, the Soviet Union, like the United States, has some of the best schools in the world. There, as here, schools vary in types of training, quantity of training, and quality of instruction offered.

Soviet education has two major streams. One group of students moves through the ten-year schools to the higher institutes or universities. Another group moves through the seven-year schools to the "technicums," or vocational schools. There are also many evening

literacy schools for adults, town schools (Grades 5-10) for working youth, and night schools (Grades 1-7) for working rural youth.

Virtually all vocational training is included in the formal school structure. This pragmatic emphasis is an old czarist tradition that has been elaborated by the Soviet regime. The plan is well adapted to the demands of rapid industrialization in a country where all skills are scarce and where leisure and consumption are minor values. American boys learn to drive tractors as play, but a Russian boy takes a course in tractor-driving. The vast on-the-job training program, which in the United States is supported by private industry, is, in Russia, the task of special schools, each linked to its industry. This vocational emphasis and the changes that are made in it from time to time are related to Bolshevik philosophy, to tensions within the society, and to the Party's ambivalent ideas about human nature.

In both the United States and the Soviet Union, about one person in four attends some kind of school. The Soviet figures include correspondence and agricultural-extension students as well as students in specialized trade schools that supply the kind of training given on the job in the United States. Just a few years ago in the Soviet Union only one young person in eight finished ten years of school (equal in days to our twelve years), but by 1957-58 this proportion was substantially higher (2). With the improvement of rural schools, apart from any other developments, Soviet enrolments will rise substantially. We have about twice as large a fraction of the population enrolled in higher schools—three versus two millions in actual numbers. But we must acknowledge that much of what we call college work is studied in secondary schools in the Soviet Union. Half of the Soviet university students are women, in contrast to a third in the United States.

The breaking points in the Soviet education ladder have, up to now, resembled the European rather than the American pattern. Before the recent expansion of the ten-year schools, an expansion that started after 1952, graduates of Soviet general secondary schools

were somewhat more likely to enter universities than graduates of our high schools were. Thus in the United States in 1950 the ratio of higher to secondary enrolments was .30. In Russia the ratio of higher school to general secondary-school enrolments was .65 in 1950 (and .54 in 1914). However, the Soviet ratio is cut in half if we compare higher-school enrolments with the total enrolment in secondary schools, including technicums and other vocational schools. Also, since secondary school in the United States extends over four years as against three years in the Soviet general secondary schools, adjusting the American ratio to the Soviet base would raise it to .40. The real difference is in the streaming of secondary schooling in the Soviet Union, not in rates of continuation from all kinds of secondary schools into the universities.

Only a small minority of Soviet children continued all the way through primary and secondary school. In 1950 in the Soviet Union, for every hundred pupils in the seven primary grades, there were four students in Grades 8-10 of the ten-year schools and four in the technicums; the total of eight students for each hundred in primary school may be compared roughly with the United States figure of thirty high-school students for each hundred in the first eight grades. Less than 10 per cent of Soviet youth completed a tenth year of school, compared with 55 per cent who completed high school in the United States. However, after 1950 there was a rapid increase in enrolments in Grades 8-10 of the ten-year school (and smaller increases in the technicums and schools for working youth). It has been estimated that by 1954 about one in eight Soviet students completed ten years of schooling, and a rapid increase continued after 1954. (Meanwhile, increases in enrolments in higher schools have been relatively small.)

The disparity between urban and rural rates of continuation from primary school into secondary school is considerably narrower in the United States than in the Soviet Union. In 1955 about 60 per cent of the Soviet seventh-grade graduates entered an eighth year in one secondary school or another—86 per cent in the towns and 46 per cent

in the rural areas. Most ten-year schools are located in towns. Of the 271 cities having a higher school or university, most have only a teachers college. Six cities have a fourth of all the higher schools. The government has made strenuous efforts to spread schooling among the tribal peoples, neglecting large sections of the peasantry in the process. It is difficult to avoid the conclusion that most college students come from towns and from European areas of the Soviet Union. Soviet education is not an all-extensive, well-oiled machine for turning out physicists and engineers. Local contrasts are sharp, and the two-track philosophy has been applied diligently.

Nevertheless, the two-track system is overlaid by the technocratic pattern: the contrast lies more in the status and level of a man's later job than in the kind of schooling he had—humanistic or vocational. There are only thirty-five universities in our sense of a multiplex organization; the other seven-hundred-odd higher schools are specialized. Schools resembling our liberal arts colleges do not exist.

Enrolments in higher schools are divided as follows: education, two-fifths; engineering, one-third; and the remainder in agriculture, health, and socioeconomic fields (mainly law). Pedagogical degrees are normally given in a subject field. The Orthodox church has a few seminaries, and there are higher Party schools as well as military and police academies. Each higher school is closely linked to a particular branch of the economy. There are, for example, separate engineering institutes for different types of heavy industry as well as separate road, railroad, and canal institutes. Much of the research carried on by private firms in the United States is in the Soviet Union assigned to a higher institute. The arts, music, and drama are also taught separately. Recent data are lacking, but we have figures for 1939. In that year, 5 per cent of the higher institutes and 3 per cent of the technicums were devoted to the fine arts; the share of students was lower.

In judging the quality of Soviet universities, one must take into account the fact that only a few years ago full professors made up

less than a tenth of the teachers. A fifth were docents, but the majority were assistants and instructors. Of this whole teaching corps, a fifth held doctorates (doubtless superior to ours). Only two-thirds of the full professors held the doctorate, and a fourth of the docents had no graduate degree. Large professorial salaries are paid to a small group; but many assistants are hired, and research time is normally a large part of the faculty load. Textbooks for many courses are reported to be mediocre.

The role of secondary-level vocational schools, or technicums, must be seen in relation to the developments of proletarian education during the Soviet regime. Policies have been complex and rapidly shifting. After the Revolution, encouraged by enthusiasm for American progressivism, vocational education swept the scene with projects, study units built around production tasks, and part-time factory work. Zealots wanted to abandon schools for useful work. Since these changes did not produce the results desired, in the early 1930's the policy was reversed.

The lack of almost every kind of industrial skill was the main obstacle in the five-year programs. At first, trade schools provided short cuts in the preparation of a cadre of technicians from a relatively uneducated and technically inexperienced population. From these various experiments, the technicums emerged for training semi-professionals, or people who take trade courses after completing elementary school. There are now more than thirty-five hundred of these technicums. A large share of the students do their work in night school or by correspondence. The technicums were recently upgraded, and more than half the entrants now come from ten-year schools. The bulk of the technicum students with previous ten-year training are in education. At one time these students received a seven-year preparation plus four years in pedagogy, but today the typical sequence is ten years of general education plus two years of special training.

Regardless of the field the student chooses—or to which he is assigned—training in the technicums is narrow. Each school is affili-

ated to some branch of the economy, and general education takes second place. We must, however, appreciate the fact that technicum graduates with the ten-year preparation are as well qualified for productive work as a large proportion of our college graduates.

The Bolsheviks saw themselves as the heirs of the Enlightenment; they believed that society could be remade to suit man's true nature. This faith in rationality was sincere, though Marxist dogmas about societal development gave this philosophy a technocratic twist. The death of the Europeanized Lenin and the rise of the provincial Stalin gave this narrower viewpoint a demonic impetus—an outcome favored by dogmas about the uncurbed leadership role of the Party. Most humane elements in Marxism dried up. Unexpected obstacles in economic programs combined with dictatorial methods inevitably produced tortuous turns in policy. Rationalized production in a complex economy demands experimentalism, diversity of programs, and sensitivity in adjusting means to ends. In a totalitarian regime, each readjustment becomes a battle of ideologies and naked might. But the critical tests did not come in the intellectual sphere, however melodramatic the Party rages over decadent literature and tuneless music. The test case centered on the issue of how much autonomy to give industrial managers: officious meddling undermines efficiency in production.

Three educational problems associated with technocratic rationality warrant scrutiny here: rigidification, malallocation, and reallocation of misplaced resources; conflicts between mass and elite ideologies and their impingement on the schools; and insubordination among youth.

Paradoxically, monopoly of education by public agencies is supported by czarist tradition as well as by Soviet doctrine. Every activity is shaped by national objectives; no citizen may plan his life; each individual must adapt his motives and his career to the needs of the state. The annual plan sets quotas for every kind of specialist,

and schools allot the needed places. Any surplus would-be geologists, for example, must make new vocational choices.

Every curriculum is standardized, and students have almost no electives. So much has been published about Soviet courses of study that this topic may be passed over here. It should be kept in mind, however, that the widely cited figures on enrolments in physics and mathematics apply to the ten-year college-preparatory schools. How many students are enrolled in these schools? What does "ten years of math" mean? How much of what is taught is learned? What kind of civilization would be produced, there or here, by an effective curriculum of the advertised Soviet sort? Questions like these are seldom asked. In any case, it is evident that vocationalism is growing, for in 1955, even in the ten-year school, the humanities were cut to less than half the total study hours.

There is considerable evidence that not everyone has been convinced of the need to sacrifice for national goals. Endless efforts are made to indoctrinate all in the Marxian dialectic and to demonstrate that this ideology validates each successive turn in policy. At one time, big differences in wages were labeled capitalistic; later, income inequalities based on socioeconomic roles became the essence of socialism. Much content in the "humanities" is drill in Marxian scriptures, not unlike the preaching in our more unimaginative civics courses.

Even if we visualize the economic plan as a program that accurately measures out tractor drivers or petrologists, in the numbers and of the quality needed, many features of Soviet education produce square pegs. For example, bright students tend to select the heavily rewarded physical sciences and technologies, however much these students might prefer a career in other fields. Undoubtedly, the proportion of students who select these fields is greater in the Soviet Union than in the United States. Only part of the inducement is financial. Additional incentive lies in the freedom of these fields from political censorship.

Centralized management is tempting to devotees of planning, but flexibility and initiative are not so easily brought forth. There are constant complaints that students cram and show no originality. In the arts, the problem is how to elicit—without opening the gates to heresy—books or music or plays that educated persons will patronize. Those who plan technical education do not have to pay attention to consumer tastes. Mistakes in many sectors of education can be buried under the insatiable demand for all kinds of technicians—as we bury ours in a luxury economy and inflationary pricing.

A recent sign of both progress and ideological conflict in the educational sphere centers on the efforts to expand the ten-year schools. As long as it proved too great a task to educate the masses beyond seven years, it was possible to view as transitional the basic conflict between glorification of manual work and the more generous material rewards given to graduates of the schools or universities that produced white-collar people. Indeed, for a time, education may have had more influence on social status in the Soviet Union than in any other country.

As larger and larger groups achieve the higher levels of schooling, this close relation between education and status is undermined. The successful extension of schooling has been uncovering a series of dilemmas for Soviet leaders, who now face problems that we in the United States have wrestled with. In 1952, it was announced that ten years of schooling would be given every child in the regular schools. Up to that year, a large share of the ten-year graduates had been able to expect to enter a university, since only a small fraction of youth completed the ten-year school. These graduates were highly selected in terms of ability. To sustain these expectations after the number of ten-year graduates increased would require a greater expansion of the higher schools than had been scheduled and a lowering of entrance standards.

To dispose of the surging stream of secondary graduates, it was announced in 1955 that each child would go through either a regular or a vocational ten-year school. It became necessary for someone

to decide which children would attend each type of school. The battle of intellectual elite against a more intellectually democratic educational policy was clearly joined (3). A debate followed. Should separate streams be operated in each school? Should separate schools be established for each group of students? Should an eleventh vocational year be added? Tentative experiments accompanied the debate (4).

As long as secondary-school students were highly selected, they could be overworked. But when secondary schools are for the masses, "something must give." It has been admitted officially that the new student group cannot handle the studies. In the past, about nine-tenths of the students had been expected to pass each grade, but failure rates have been rising. The students' difficulties have been cited as one reason for vocationalizing the secondary program. Courses have been simplified, and craft courses have been introduced. Protests from physicians led to abolition of year-end examinations except in seventh and tenth grades, and homework has been cut to only a few hours daily. American teachers can appreciate the irony of the complaints by Soviet professors that secondary standards are not uniform and that too many incapable children are graduated.

Beyond these structural strains, more basic tensions are finding expression in errant conduct among youth. Most reports concern graduates of secondary schools and university students; discontent of the less articulate is not documented.

The Soviet experiment has been a kind of laboratory test in social control. Until recently, outside ideas have been excluded while conformity and ambition have been rewarded. Propaganda funds have been unstinted. The penalties for defaulters have been harsh. No counter influences from church or union or opposition party undermined loyalty. If any regime could mold the kind of young people it wanted, the Soviet leaders should have succeeded.

Despite striking successes, the outcome has been different from that sought by the national leaders. Perhaps basic personality and societal dynamics are not easily manipulated, nor is consistency even of

rationale easily attained. Incentives set up to move people toward one goal generate attitudes that jeopardize attainment of other aims. It was effective to hold out university education and profitable careers when most secondary graduates could hope to realize these goals. Many who are not so fortunate in the changed situation, with the enlarged supply of educated persons, become demoralized when they discover that their efforts are not rewarded. Having accepted the ideals of serving the nation, they resent being shunted into inferior places. The fact is that the Soviet regime has not fully eradicated the traditional disdain for working with one's hands. Nor can status and power motives be whisked away when they constitute a prime force in the social system.

Among the students, demoralization takes its toll as they loaf, take entrance examinations over again, or just wait for a place in a college. Some young people, along with spoiled children of the new rich, turn to vice and crime. Others (like our "zoot suiters") flaunt outlandish costumes. Among some, there is Bohemian reveling in disapproved music or art. Part of this dissent undoubtedly reflects newly discovered and wider intellectual interests than those embodied in technical education and Party dogma. Young people have enthusiastically accepted the official invitation of a few years back to shift from a production mentality to a consumption mentality. Some merely want to live well and have soft jobs in cities. Others are fed up with propaganda and listen to Western broadcasts, write satirical outlaw newspapers, and on rare occasions riot. The love theme is returning to the novel, and young people are asking whether they should marry beneath themselves. Granting differences inherent in the political system, we may conclude that both the behavior and the problems of Soviet youth are becoming more and more like those in the United States.

Party reactions to these rumblings have been confused. In recent years many controls have been relaxed. The arts are somewhat freer, and Western contacts—even with social scientists—are viewed as less dangerous than formerly. The educational system is assuming greater diversity. Yet there is much preaching and talk of duty. Threats to

send recalcitrant students to the assembly line belie the glorification of the proletariat. Harried searches are made for study programs to satisfy all persons. The first moves have been made to set up boarding schools, where allegedly all children would eventually be enrolled; the aim of such a system seems to be to mold the students' mentality more effectively (5).

Most citizens of the Soviet Union undoubtedly believe that they enjoy the right and the reality of equal opportunity. Democracy in this sense has plainly been a Soviet goal and has exerted a clear influence on the educational system. The total number of persons to be trained has risen steadily in successive plans. Moreover, the fact that training is formalized and budgeted has created at least the presumption that each person who is ambitious enough will receive all the training justified by his abilities. Enormous resources have been used in persuading people to seek this training and to strive for better jobs. There have been generous arrangements for accepting individuals with irregular preparation in vocational and higher schools. For example, correspondence students take their examinations on paid vacation time.

However, if we are to avoid grossly oversimplifying the picture, we must examine the selective factors. The most important ones have been these: inverse social-class selection in earlier years; equivocation on the intellectual-elite principle; extreme differences in availability of schooling from locality to locality; costs of secondary and higher education; favoritism for some children.

During the 1920's, the proletariat was favored in allocation to the best schools; to hasten eradication of capitalist views, children of the previous elite or intelligentsia were excluded. There was a simultaneous effort to short-cut schooling by moving workers quickly through trade schools into universities. Examinations were largely eliminated, and projects became the vogue. Disappointment with this plan brought a restoration, in the early 1930's, of formal courses, tough examinations, and strict discipline. The recent expansion of second-

ary-school classes to embrace mass enrolments changed this picture once again with respect to both the content and the distribution of opportunity for education. But, throughout, the elite concept of "intellectual" selectivity has remained influential.

The restricted availability of higher schools (except pedagogical schools) to a few cities has been mentioned. Children leaving the seventh grade in a complete ten-year school have had first chance at eighth-grade places.

The fact that "free education" is not totally free has frequently been recognized in the United States. In the Soviet Union, as in other countries, a major part of the cost of secondary education to students and parents (and to society) is in the personal earnings foregone. There are also incidental expenses; uniforms, books, and supplies must be purchased. But, in addition, from 1940 to 1956, beginning with eighth grade, there were tuition fees for attending the ten-year schools, whereas no tuition fee was required of technicum students. Also, rural parents sending their children to a ten-year school commonly had to pay the cost of boarding them in the city. Since the vocational schools were cheaper and more widely scattered, only exceptionally able, strongly motivated, or socially and geographically favored children would normally avoid this type of school.

The ideological dilemmas associated with these inequalities have presented a fascinating picture. Despite unceasing pronouncements on socialist opportunity, Soviet Russia has not until recently seriously undertaken mass education beyond the lower grades. It has been argued persuasively that strict testing of achievement and selection of the talented for higher training is democratic, however much freedom of choice is surrendered. Yet Party leaders have worried about the growing pressure for college entrance. They continually preach that every job is an honest contribution to the workers' state. "The school and Komsomol [Young Communist League] are still not bringing out habits of work, respect, and love for work adequately among pupils. . . . To our regret they do not strive to augment the interest of the pupils in becoming skilled workers, mechanics, tractor

and combine drivers. Komsomol organizations must always explain to pupils that the doors are wide open not only to higher educational establishments but also to plants and factories, motor transport stations, and kolkhozes [collective farms], where they will find unlimited scope for their inspired creative work and for the continuation of their education" (6).

In the Soviet Union, as elsewhere in Europe, the faith placed in examinations as measures of ability and achievement is far greater than in this country. The literature on testing suggests to an American educator that Soviet school officials have an exaggerated faith in the validity of examinations, even in terms of Soviet values. One infers that very few individuals of low ability enter a Soviet university today. There must, however, be many a capable youngster who fluffed on the tests. When one takes into account the crowded housing conditions of most families, one suspects that children of the middle and upper strata show up better in relation to ability both in day-to-day classes and on examinations.

Nor have bias and favoritism been wholly excluded. University officials have been arrested for falsifying student records—perhaps in a better cause than that espoused by our college officials when they compromise in this way for athletes. It is freely acknowledged that children of important people are sometimes favored in marks, particularly in oral examinations. This bias is especially likely for marks on conduct, which are affected by political activities and count in university entrance. It is rumored that the elite manage to have the best teachers assigned to schools in their neighborhoods (just as in the United States the superior schools are likely to be those in the best residential areas).

Although from 1940 to 1956, Soviet secondary schools of the ten-year stream and universities charged tuition fees, students who passed university entrance examinations were commonly aided with stipends during their university training. The stipends averaged about half of a laborer's income. Thus, many Soviet students are in the position of the growing minority of American college students who receive

subsistence or partial subsistence scholarships. During the years when tuition fees were charged, there were exempt groups: veterans, orphans and children of the crippled, children of retired senior military officers, and children of persons who had received prizes for eminence. The latter two exceptions certainly were not democratic. Children of teachers are favored in admission to teachers colleges.

University stipends are an old czarist custom: from time to time in the nineteenth century and the early twentieth century, serious efforts were made to enable poor youth to attend the university. During the 1930's, when the government was striving to proletarianize universities, stipends were indispensable. Today the stipends play a part in guiding youth into study programs that supply the most needed skills. Undoubtedly these awards bring many intelligent but poor and otherwise not sufficiently motivated youth to college. In the United States we tend to admit anyone to college (some college) who meets low academic standards if he has the money. Our premium colleges, moreover, are not available strictly on the basis of academic merit except to a top minority on institutional scholarships. The Soviet government strives to restrict higher education to the most gifted (if politically acceptable) and to make sure that such students can live regardless of parental income.

When we ask who gets into Soviet universities today, we are blocked by lack of recent data and must return to figures for 1938. In 1938, the higher schools had not yet reached peak expansion, but that year marked the end of the period when every effort was made to enrol preponderantly proletarian youth. At that time, salaried people and specialists and their children made up two-fifths of the university student body; urban workers and their children made up a third; members of collective farms made up a sixth. The other tenth were peasants or craftsmen and their children (7). In the absence of comparable data for the parental population, various interpretations of these data are possible. One writer estimated that the so-called intelligentsia formed less than a tenth of the labor force but furnished something over four-tenths of the college students,

Other commentators conclude that the middle and upper Soviet strata have a disproportionate share of enrolments, as similar strata do in other countries; still, children of urban workers were more fully represented than in any other country.

We can only speculate as to what may have happened after 1938, though there are some clues. First, there has been a settling down of the fluctuations in social status of individuals and groups; at the same time, the number of non-manual workers has greatly increased. This situation would tend to decrease the number of children of manual workers enrolling in the universities unless efforts to maintain these enrolments had been intensified. Actually, special campaigns to expand peasant and manual-labor representation in higher schools have not been conspicuous since the 1930's. Expansion of the ten-year schools and their establishment in new areas would bring about an increase in the proportion of youth qualified for university training. However, the proportion of secondary graduates admitted to the universities and other higher schools has declined. How these occupational and policy changes balance out with respect to selectivity is uncertain. One can only ask, if higher schools have become more democratized since 1938, why have the data to demonstrate this fact been withheld?

The ratios of secondary to primary enrolments noted earlier indicate that until recently few young people obtained any secondary education. Because of the stress on certificates from higher schools in filling responsible positions, those who did not attend the regular secondary schools had poor prospects unless they were unusually talented or active politically or both. It is the children of peasants who suffered the greatest handicap. We have already noted that parents of rural children who attend ten-year schools in towns frequently had to pay for their room and board in the city. For several years, farm youth were systematically drafted into trade schools and assigned to jobs with little opportunity to compete for other types of schooling. Since urban children have a ten-year school nearby, many urban children who enter universities undoubtedly have less

talent than many peasant children who are shunted into vocational schools at an early age.

Equitable student recruitment, like pragmatism in education, is not a Soviet invention—despite forty years of propaganda asserting that under the old regime only the elite went to college. No one should withhold credit, however, for the vigor with which the present regime has assimilated and expanded these educational policies. As far back as 1897 a sizable fraction of the bourgeois and skilled manual

TABLE 1

LITERACY AND SCHOOL ATTENDANCE IN EUROPEAN PROVINCES OF RUSSIA IN 1897, BY AGE AND SOCIAL STATUS\*

SOCIAL STATUS	Total	PER CENT ABLE TO READ		Total	NUMBER PER THOUSAND WITH AT LEAST SOME MIDDLE SCHOOLING	
		Age 20-29	Age 40-49		Age 20-29	Age 40-49
Urban males:						
Nobility, professions, officials	98	98	98	710	721	748
Clergy.....	99	99	99	852	831	746
Burghers, craftsmen, etc.....	73	79	69	69	91	50
Peasants.....	62	64	50	11	9	4
Rural males:						
Nobility, professions, officials	77	81	80	251	273	338
Clergy.....	98	98	98	716	753	775
Burghers, craftsmen, etc.....	60	67	60	23	34	33
Peasants.....	36	42	29	1	2	1

\* Source: C. Arnold Anderson, "The Literacy and Educational Census of 1897," *Genus* (Rome), XII (1956), 1-18.

groups had some secondary schooling and access to universities. Nor was the population of that day as illiterate as is often assumed. Data on this point are given in Table 1. Among urban males, the level of literacy toward the end of the nineteenth century was impressive, and schools for children of workers and peasants were being organized rapidly. Universities of that time were of high quality (8). The czarist universities enrolled many students of humble origin, as Table 2 shows. Many women were also enrolled. A projection of prerevolutionary trends toward the expansion and democratization of educational opportunity would (to some observers) suggest a twentieth-century development very much like what has in fact taken place.

Apart from the peasantry and some other segments of the rural population, it seems highly probable that in the Soviet Union a larger percentage of the most talented youth enter college than in the United States, despite the fact that we enrol a larger proportion of all youth. Differences in selection procedures mean that more of our students have modest ability, and there is not the same drive to work hard among them as among Soviet youth. The Soviet administrators make a noteworthy effort to identify children who have artistic or musical talent in early grades. These children are moved into special schools.

In general, the Soviet Union may well recruit its college students more "efficiently" than we do. How far this pattern of recruitment

TABLE 2

SOCIAL COMPOSITION OF STUDENTS IN CZARIST HIGHER SCHOOLS IN 1914\*

SOCIAL STATUS	PER CENT	
	General Universities	Technical Universities
Nobility, professions, officials..	38	25
Clergy.....	7	3
Merchants.....	11	16
Workers, petty bourgeoisie....	24	31
Peasants and others.....	20	25

\* Source: see Note 7.

goes in constituting a sound sole criterion of selection is another question. Their system is combined with rigid job quotas. It is state oriented and production oriented, it involves rigid limitations on choice, and it leaves little room for values related to personal, individual living. The two systems, American and Soviet, rest on principles that differ in many ways, but both systems manifest a waning allegiance to the humanistic tradition.

Impressive as Soviet accomplishments are in many directions, there are no simple lessons in education for us to learn from Soviet Russia. Perhaps the most striking fact is the fundamental similarity—despite strong political differences—in the many still unsolved problems here and there. They, like us, are trying to solve these problems within a framework of values and goals and associated constraints

concerning methods and means. How much mathematics? How much physics? How fast a pace? What kind of stipends? What processes and criteria of student selection? Behind these issues lie broader and deeper issues. If we would develop new policies, we need to examine not only our own values—those we share and those in which we differ from the Soviets—but perhaps also the values that we, along with the Soviet Union, have neglected.

#### NOTES

1. *Saturday Review*, May 25, 1951, p. 9.

2. Many of the data and observations in this article rest on special translations of Soviet documents. Most of the pertinent statistical data may be found in Nicholas DeWitt, *Soviet Professional Manpower: Its Education, Training, and Supply* (Washington: National Science Foundation, 1955). Other information, especially on ideology and policy changes, is summarized in George S. Counts, *The Challenge of Soviet Education* (New York: McGraw-Hill Book Co., 1957).

3. American enthusiasts for the elite principle may ask whether we can achieve "the optimum utilization of talents" without sacrificing freedom. International comparison of the social composition of student bodies can be found in the writer's "Social Status of University Students in Relation to Type of Economy," *Transactions Third World Congress of Sociology*, V (1956), 51-63.

4. The latest stage, not discussed here, involves a partial abandonment in 1958 of the announced universal ten-year program. Except for a small minority, all students above the primary level will in the future either attend trade schools or be required to take jobs, receiving formal schooling only on a part-time basis outside of working hours.

5. It is not easy to assess the meaning of the 1958 reforms in this connection. On the one hand, the work requirements force most secondary and university students to combine academic effort with manual work. On the other hand, the exemption of a small intellectual elite from these requirements could exaggerate the problem of traditional status attitudes with respect to work suitable for a man or woman so favored. It is not clear what part long-term considerations of attitudes may have played as against short-term efforts to draw young people more immediately into the working force.

6. Translation of a 1954 Soviet broadcast, supplied to the writer.

7. *Kul'turnoye Stroitel'stvo SSSR: Statisticheskii Sbornik*, 1940, p. 114.

8. It is perhaps not a rash supposition that in 1900 there were more Russian than American intellectuals with world reputations.

## *The Secondary-School Curriculum in the Changing Twentieth Century*

For the purpose of this article I mean by the curriculum all that it is planned to teach systematically in a school. This definition omits from our consideration much that is learned at school and much that schools want to inculcate. But it describes the limited part of the whole on which I should like to focus discussion.

The secondary stage of education begins at different ages, and lasts for different periods of time, in different places. One is therefore compelled to be arbitrary. I shall assume that by the secondary stage of education we mean education between the ages of twelve and eighteen. I shall think of it as falling into a junior stage up to fifteen and a senior stage between fifteen and eighteen, though I am aware that actual educational structure does not always follow this pattern.

What, in broad terms, are the changes that we are witnessing in the twentieth century and to which we ought to pay attention in framing our secondary-school curriculum? There are changes in the kind and in the amount of education itself, and there are changes in the world for which education is supposed to be a preparation.

The educational changes of this century that bear on the secondary-school curriculum are not only those connected with its extension to greater numbers of young people than before. We have to consider also a profound change in thought about the content of education. An older view was ironically (and no doubt unjustly) characterized

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by Mr. Dooley in his famous observation: "It doesn't make much difference what you study, so long as you don't like it." But behind the attitude so characterised there was a theory: that the training of the mind is a rigorous process unlikely to prove congenial to the young and that the study of any exacting subject—whether or not it seems interesting or useful—will develop mental and moral qualities that can function generally in later life.

This theory was based on the assumption that what is learned in one situation can be transferred to quite different situations. The theory overestimated the common elements that most situations share. The assumption that, for instance, excellence in composing Latin verses at Oxford qualified one for dealing with the indigenous peoples of Africa has been increasingly doubted. Secondly, the theory overlooked the importance of "motivation" in learning. Children just would not learn, however hard you flogged them, if their interest had not been aroused. It was pointed out that children are born with a good deal of curiosity, that adult pressures could discourage their exploratory impulses, but that the wise teacher so far from repressing these impulses tries to ally himself with them. This is all familiar doctrine to us and has been these many years.

The supersession of the theory ironically stated by Mr. Dooley is a commonplace of educational history. At the present time we seem to be reaching the end of the phase that has been its antithesis. If one wished to play Dooley to this phase, one would say: "It doesn't make much difference whether you learn anything at all, so long as you are never made to study anything you think you don't like." This statement would no doubt be as unfair to the teachers, and even the theorists, of the epoch now closing as Mr. Dooley's quip was to traditional pedagogics. But caricature as it is, the phrase catches something—a tendency, an extravagance—that has made the layman, and many parents, uneasy. This is obviously so in America now. But it was a British parent that I heard say recently: "How long has it been right that school should be the place where children learn to play, and home the place where their parents have to teach them how to work?"

We all know the standard answers to that question; and up to a point they are right. But I suggest that they are less right, in terms of either curriculum or method, as you move up from the infant and primary school and through the secondary school. In the United Kingdom many people would say that the newer ideas and practices of the last thirty or forty years have had their most beneficial effects in the infant schools and the lower grades of our primary schools. There the important research that has been done on the ways in which young children develop has borne fruit in school practice. On the other hand, in spite of much good work on development in later stages the psychological concepts that have filtered through to the administrative mind have been sadly inadequate.

Take, for example, in England our now notorious doctrine of "tripartitism" that was expressed, not (be it noted) in our great Education Act of 1944, but in the administrative circulars by which the Ministry of Education tried to give effect to the Act. In order to provide an education suitable to young people of different ages, aptitudes, and abilities, we assumed that there ought to be three different types of secondary school. We were to have a secondary school for academically gifted boys and girls (the secondary grammar), another for young people of high technical ability (the secondary technical), and one for the remaining 75 per cent who were assumed en bloc to be better at practical tasks than at general concepts (the secondary modern). Like other trinitarian doctrines, this one has been hard for the layman to understand. Now after a mere decade of experience something like half our local educational authorities have abandoned thorough tripartitism; a few have substituted the idea of the fully comprehensive school, and many have secondary schools that combine features of the three theoretical types. Most important of all, the secondary modern schools show every kind of variety from strictly academic to technical studies.

But the problem of devising a curriculum for any of these secondary schools is extremely difficult. We are now facing the problem that has been inherent in the American experiment of extending secondary education to all and about which there is so much anxious

stock-taking in the United States. When you extend secondary education beyond a favored elite, especially if you prolong schooling beyond the stage of physiological maturity, you are bound to pay more attention to letting the academically weaker students study subjects that they "like" and that seem useful to them.

We have to be on guard against running after every new thing. At the same time, we must not imagine that the traditional curriculum was the perfect one for all time and that the curriculum of twenty or forty years ago is necessarily right for us if we desire serious intellectual standards. What people have been disposed to consider the one right curriculum for a given kind of student has always in some degree reflected their own social situation, which may not be ours. We have debated endlessly the proper content of a "liberal" education in a framework of discourse suggested through our reading of Aristotle, though many people have pointed out that we cannot make sense of this without reference to the role and status of the free man in the Athenian society of his time. Similarly we can understand Locke's belief that Latin was a necessary accomplishment for a gentleman but a waste of time for the young man going into the countinghouse only if we have some knowledge of the social structure of the English society for which Locke was prescribing. Our young people will lead a somewhat different life. The way to prepare them for that life must therefore differ somewhat, too.

We have been driven to extend our secondary-school curriculum in England simply because, like the United States earlier, we have extended the secondary school. We have had to broaden the range of interests because we have broadened the range of students. At the same time, we have nowhere broken sensationally with secondary-school traditions, and we do not think that every useful skill is best imparted in a school.

For this reason our attitude to the experience of the American high school is ambivalent. We recognize that we in England are now moving into situations that have produced difficulties in the United States. But though we recognize that the difficulties are to

some extent in the situation, we are puzzled at some of the rumors floating across the Atlantic. We have heard of "driver education" and other aspects of "life adjustment." I cannot properly comment on these things as they derive from an American social situation. I can only report our own attitude. We should hesitate very much to put such "subjects" into the school timetable. From the admittedly extreme view that, given student interest and reasonably good teaching, the subject studied does not matter very much, all of us would register strong dissent. Not all things that young people should learn in school are immediately "interesting," and not all interesting or useful things are equally appropriate in a school timetable. We must relate secondary-school studies to the differing interests and abilities of different students, but we must keep the emphasis on those that are of high educational "potential."

In saying this I do not forget that some studies, supposedly "liberal" in their own nature, may become of poor educational effect in the hands of a poor teacher; nor that many "technical" studies, liberally taught, may contribute to a genuinely liberal education. Latin may indeed be a dead subject; but if so what then makes it a dead subject is not the fact that it is a dead language but that it is taught by a dead teacher. Woodwork and metalwork, well taught and inculcating the pride of the real craftsman, may certainly contribute to a liberal education. But there are limits to this possibility, especially when one has in mind not the teacher of genius but the average teacher.

No doubt it is too late to ban shorthand and typewriting from all our schools, but I confess that I am not easy about them. Not that shorthand is not useful. Indeed, I have often thought that no reporter should be allowed to cover a meeting or interview a victim unless he knew shorthand and would be able to produce his shorthand notes later if challenged for accuracy. But the educational possibilities in shorthand are very limited. I would sooner have a secretary who had formed the habit of good reading than one who had spent secondary-school time in learning shorthand. This is a skill

merely and seems to me best learned in a short and concentrated secretarial course taken outside secondary school. Usefulness is no adequate guide in drawing up a curriculum. Nor is a naïve idea of relevance to the life of the community. There was much to sympathize with in Gandhi's ideas in his Basic Education. It was right to root Indian education in village life, as it had not been under the British. It was right to try to educate the head, the hand, and the heart together. But Gandhi's insistence that all education should be based on the learning of a traditional craft was greatly overdoing things. We are not just educating producers; we are educating human beings. As Professor Humayun Kabir said in his recent book, *Education in New India* (1), it is difficult to teach algebra through spinning.

Although a modest degree of differentiation among students may be reasonable even before the age of fifteen, yet basically education for everyone up to the age of fifteen should be general education. With allowances for these limited exceptions, the differences between the education of young people with different aptitudes or levels of ability should be differences less of subjects taught than of methods used in teaching them.

A few months ago I heard an interesting radio talk by a teacher in one of our secondary modern schools. He had himself been at an "academic" or grammar school, had taken his degree, and had then at first taught in a grammar school. He said that his problem in starting to teach in the secondary modern school had been, not to learn new subjects, but to teach the same subjects in a different way. Not unsurprisingly, he had found this difficult. Some of our secondary modern schools have not "found themselves" yet; but some have. If you entered a classroom in one of the latter, you would often hear teaching of the same nominal subject as in a secondary grammar school but through methods that were adapted to the particular students that were being taught. But, again, within limits.

I was fascinated in one modern school by the methods a mathematics master had worked out to introduce his students to the practical uses of mathematics in the neighborhood—from farmers' calcula-

tions as to the profitability of their dairy herds to the municipal mathematics of raising and expending the local taxes. But this approach was limited, he told me, to a third of his total time for teaching the class. Without any practical applications, the students' interest might not have been aroused. With much more practical application, they might have wandered too far from the principles that sometimes were better explained and fixed in the mind by examples devised for the purpose than by intractable ones from real life.

To sum up then, the curriculum in secondary schools for all young people up to fifteen years of age will necessarily show, especially in the last year, a degree of differentiation, in part of a prevocational kind. It is to be remembered that there is more than one road to a sound general education. But, with some allowance for these facts, the curriculum should be one of general education. In a program of general education, I would include language and literature (the mother tongue for all, with one other language for a good proportion of young people), history and geography, mathematics, science (either as general science or with differentiation into specific sciences), and some practical subjects (extending into pre-technical education in the last year or so for those whose bent is in this direction). For students of different aptitudes or levels of ability, differentiation should be much more in method of teaching than in matter taught. In other words, we should be conservative in what we wish to have taught; less conservative in the content of any subject taught; and the reverse of conservative in the methods by which it is taught.

When we consider the content of education in secondary school for students from the ages of fifteen to eighteen, we come up against much more difficult problems than those that face us in the junior secondary school. The answers we give to the question as to what shall be taught depend in part on the answers to some questions of public policy that are quite external to the classroom. We may assume here that we are considering a free society, not one in which young people can be more or less drafted to any occupation to which an all-powerful state may choose to call them. But we still need to know

the relationship between the school and the economic and social policy of the state. Equally we must consider whether the senior secondary school is to be for an elite only or for the greater proportion of the age group. And we need to know for how many secondary education is terminal and for how many primarily preparation for college and university.

According to figures given by Professor Schultz in *The High School in a New Era* (2), only 12 per cent of young people between fifteen and eighteen years of age were in school in Britain in 1950, as against 76 per cent in the United States. This difference is so great that one might suppose that the problems of curriculum in the two countries were of a quite different order. But this would be to overstate. One should remember that in 1950 the United Kingdom had only just started on its postwar educational reforms. Now there is a steady increase in the number of students who voluntarily stay on at school beyond the minimum leaving age. Equally one might note on the American side that taking a figure for this age group as a whole obscures the fact that 40 per cent of those who enter the American high school do not graduate.

The minimum leaving age in Britain may not go up to sixteen in the near future, though the Act of 1944 empowers the Minister to raise this age when he thinks fit. There are matters of higher priority to deal with first, such as the large number of oversized classes that make good teaching difficult. Some people in Britain feel that, before raising the school-leaving age, we might carry into effect the clauses of the 1944 Act that promise further part-time education to the young people who have left school for work. My own feeling is that in England the door to continued secondary education after the age of fifteen needs to be opened to a much larger number of young people, and I would encourage them to stay on at school. But I feel that secondary education after the age of fifteen or sixteen should normally be for young people who are willing and able to benefit by it. I would interpret "ability to benefit" generously, but I would not include those who are clearly less interested in continuing school

than in entering the young adult world outside. For these young people I would continue education compulsorily up to eighteen, but in terms of one or two days a week, or two or three months a year, and in connection with the young adult interests that filled the remainder of their time. I would only add that at every stage there must be "ways back" into the formal education stream for those who, after they have made the decision to leave it, rediscover an interest in systematic study.

This view may shock some Americans. But I wonder whether there are not many who would say that their high schools would have been able to serve the nation better if they had not had to retain at school many physiologically mature young people, neither able nor willing to study seriously and only spoiling the school for those who were rightly there?

Let us assume then that we have in our senior secondary schools those who want to profit by continued school education and, on a generous interpretation, are able to do so: that is to say, many more than the 12 per cent of 1950, but rather less than the 76 per cent of the United States. What do we teach them? The capital problem is to resolve a seeming antithesis. You do not get a trained mind unless, in addition to having a sound general education, you have made a reasonably thorough study of at least one special area of knowledge. On the other hand, just because social and technological change is now so rapid, we cannot afford to produce narrow specialists capable of doing one thing only.

Now in England I am quite certain that our upper secondary education is overspecialized. It has even been said that it is the most specialized in the world. Undoubtedly our young men and women who go on to the university (again to study in a way more specialized than in the United States) go there well prepared in their chosen subject or subjects; and it would be agreed that they have learned the habit of hard, independent intellectual work. But the price is heavy: not only are our students lacking in important branches of knowledge, but from the absurdly early age of fifteen they have been virtually

barred from a whole range of careers. The more our young people stay on in school till eighteen, the more dangerous to the development of our society this premature specialization will become. I am sure that we shall have to take serious measures to correct it. The key is largely in the hands of those who decide on university entrance requirements.

In the United States the danger would seem to be the opposite one. It is said that too little is done in high school to promote the habit of rigorous intellectual work. If this is so, the remedy must lie in providing an atmosphere in which hard intellectual work is more favoured and in encouraging a greater measure of concentration of studies. Can this be done without losing what seems to me a real asset of the average young American as compared with his British counterpart: willingness to turn his hand with some confidence to quite a range of different things? Here I note an observation made by that judicious observer William Whyte, Jr., in his book *The Organization Man* (3). He says that, although large sums of money are spent in the United States on science, from teaching to research, a very high proportion indeed is spent on applied rather than on basic science. No one would say that in secondary-school teaching the applications of science should be ignored; but for serious intellectual training, as well as in the interest of research in the long term, it is basic science that matters.

There is a great clamour now for the teaching of more science and more technology in our schools and colleges. I think this is right. But all the same, we should keep our heads. I do not mean that we should bury them in the conservative sand, but we should think carefully about our real needs and take steps that are educationally as well as "sputnikally" defensible.

It is interesting to note that, of the three types of secondary school that it was proposed to establish in England after the war, it is the secondary technical school that has been least developed—and this at a time when we are very conscious of the need to do better in technical education. The reason, however, is not discreditable. More

and more people are saying that the two other kinds of school (the grammar school and the modern school) can do all that is necessary at this stage. The boy who is going to be a high-grade technologist needs to study the basic sciences first; this he can do best at the grammar school, which is a secondary school of liberal arts and sciences. The boy whose interests and aptitudes (or lack of aptitude for learning in abstract terms) turn him toward technician's work (that is, to more mechanically applied science) will get what he needs in conjunction with general education at the secondary modern school, followed by part-time study at our technical colleges for young adults. The British record in pure science, in research, and in basic ideas for inventions, is very high, much higher indeed in a whole range of enterprises from nuclear research to radar and jet propulsion, than many Americans realize. Our chief need in higher education is more institutions for technology, and we are taking steps to establish these. In comparison with the United States we need a greater number of people trained in applied "know-how." Whether we can assume that the two countries can be so closely associated for peaceful and defense purposes that we might divide the field is a nice point. There should be the fullest possible interchange of information; but all the same it is probably wise for the United States to be paying attention to its comparative (and it is, of course, only comparative) under-investment in basic science and for us to be paying attention to our comparative under-investment in technology and technical education.

There is, however, another question to consider, and this question concerns us equally in the present age. The problem of the senior secondary-school curriculum poses the question, not only as to the number of pure scientists, technologists, and technicians we want, but as to the degree to which we want a scientific and technical component in the education of everyone. We all live in a scientific and technical age. What is the science that a non-scientist needs to know? How is he to be taught that science in school?

I suggest that he does not need to know how a telephone works,

how to build a radio set, or even why an airplane stays in the air. If his telephone is out of order, he will not be thanked if he tries to put it right himself. If he wants a radio and is not naturally apt in such things, he would be well advised to buy one rather than to make one himself. If the plane in which he is a passenger fails to function (or as an English friend of mine put it when he was tired of educational jargon, if the motors cease to be adequately motivated), it will be too late for him to do much about it. If he is interested in these things, good. If not, he will not need much knowledge for practical purposes and, at most, will acquire it as knowledge that illustrates some general scientific principle that maybe he ought to know.

For those whose scientific studies will figure as minor rather than major items in their curriculum, there is no point in merely starting on a course they will never complete. The science course for probable non-scientists should be devised in its own right. It should never be just the beginning of a course devised for scientists who will go on to study science for several more years, as the non-scientist will not.

If the science course is to be specially devised, what must it be devised for? In the first place, to give a youngster a grounding in, and taste for, these studies so that he can take them up again later on if he wishes or needs to: enough mathematics, for instance, so that, if he specializes in history at college and then wants to turn to the social sciences, he will not be afraid of statistics. Secondly, everyone in this day and age should have some understanding of the world view given us by the sciences and of the methods of science. Perhaps these are two things rather than one. The first can be given, as many popular books show, without personal laboratory work; though science must be presented not as a body of received knowledge but as a study whose tentative and experimental temper is brought out. The second, the methods and intellectual criteria of science, can hardly be appreciated without laboratory work. In some schools, maybe, the claim that laboratory work inculcates the scientific values would hardly stand up to scrutiny; but to inculcate scientific values is the all-important purpose of individual experiment.

In our concern to modify the curriculum in accordance with the scientific needs of the time, we ought not to forget that the political changes through which we are living are as important as the scientific. Little adjustment has so far been made to the fact that we are living in a very different kind of political world from that of our fathers. In this stage of human relationships, it does not seem sensible to educate our young in terms of the national self-sufficiency of the past. Our schools have often played an important part in fostering a sense of national community (nowhere more than in the United States), and no one wants this sense of national community to diminish. But in our own national interests, no less than in those of humanity as a whole, we must give our young people knowledge and encourage understanding that goes far beyond what was necessary before the world shrank as it has.

This purpose cannot be served simply by adding to the curriculum a few hours on "international affairs" or by encouraging "teaching about the United Nations." Such lessons have their value and should be encouraged within reason. But while they are regarded as "extras," and perhaps as extras of doubtful academic standing, our purposes will not be served. What is needed is a degree of recasting of the curriculum, of the subjects taught and even more of what is taught in them. Let me take one example of each.

The English-speaking peoples are favoured because theirs is so much the most widely spoken and understood of languages. But paradoxically that advantage becomes a handicap when there is a need for us to learn other languages. There is less "motivation" for us to do so than, say, for the young man or woman in Holland or Scandinavia. Yet can we assume that English alone will see us through? English is widely understood, and yet, even for official purposes, it is most unlikely to be accepted by, say, the Russians, the Chinese, and the French, as the sole language for international use. Outside official and professional circles, an Englishman or an American is not so much better placed than someone with another mother tongue.

An even more important consideration is the effect on the mind

and the imagination of learning another language and reading its literature. The ordinary man, even if he never travels or communicates with anyone abroad, is a voter and helps mold public opinion. It is almost impossible for him to understand that there are other ways of life (which some people, neither underdeveloped nor benighted, prefer to the American or the British) unless he has discovered this fact through learning another language and reading another literature. And it would not be saying too much to assert that this knowledge is a prerequisite of intelligent citizenship today. We must work at the admittedly difficult problem of making French seem real in, say, Kansas City. We must make our language teaching much more effective than it has been until now. And even if everybody in a secondary school does not take a foreign language, the majority should, and should take it seriously.

History provides an example of a school subject whose content we ought to be reconsidering more than we are in terms of the changing needs of our age. Here the need is not for more time to be devoted to the study so much as for a reconsideration of what is taught within that time. The standard objection to studying something of the history of mankind is that such a study would inevitably be superficial. This is entirely a relative matter. The school study of national history is superficial, too, from the point of view of a university historian, yet no one suggests that schools in Chicago or London should confine themselves to the history of those cities and ignore the history of the United States or of England as a whole. A good curriculum in history will always include the detailed study of some limited period that is rich in its implications; but this is not the only aim to be served. For most boys or girls the study of history is much less important for the information it conveys than for the views it affords. It is in accordance with these views that important attitudes are formed, opinions uttered, and action taken. Iron curtain or not, H bomb or not, we have got to think and act now as if we all lived very closely together on one planet; for we do. Just as knowledge of how the United States and the United Kingdom have come into

being and developed has been essential for the membership of those communities, so some sense of the history of mankind is essential for the membership of the community of nations.

Perhaps I may now sum up what I have been arguing here. The content of our secondary education is indeed important. We have no time for studies that are not of real educational value. The rapid and continuing extension of secondary education complicates this problem because we have to appeal to the interests of the not very academic boy or girl as well as to the interests of the intellectually gifted boy or girl. Yet the answer to the problem lies much less in changing what we teach than in modifying our methods so that everybody has the opportunity, according to his capacity, to acquire the knowledge and the maturity of mind that he needs. Side by side with these adjustments that are forced upon us by the extension of secondary education go the modifications that must be made in the curriculum to meet the technological and political changes of the twentieth century.

I would only add that every country and society will meet these problems in terms of its own social needs and educational traditions. There will be no uniform answer. American and European solutions will be different. As long as we understand this, discussion of our problems across frontiers, it seems to me, must be fruitful; for at this stage of human development we are really all facing the same problem. This problem is how to create a world community of educated but richly diverse peoples.

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## *Classroom Grouping of Students*

Teachers show considerable interest in grouping students. Several reasons seem to prompt this interest. One is the hope for more manageable classes—groups that are easier to deal with, a little more attentive, a little more responsible; groups that have fewer problems of interpersonal conflict, fewer delinquent and more supportive combinations of students.

Another reason for teachers' interest in grouping stems from the hope for more productivity—for groups that work harder, cover more ground, complete more assignments, meet higher standards.

A third reason grows out of the desire to help certain students. The child who is a fish out of water in one group may be more at home in another. What kind of group will put a student at ease? Which classmates can help him release his potentials?

A fourth reason—one we hear less often than the others—is the hope of helping the teacher as a person. Certain students present threats to teachers. By grouping, these threats can be avoided. Most teachers probably get along better with some children than with others. Quite naturally, perhaps, teachers beam their teaching toward the children with whom they feel a bond. They are better teachers when they work with these children—who may be the more dependent children or the better contributors or the most out-going students.

A fifth reason for interest in grouping leads us to the subject of school achievement. Teachers want their students to learn more, to

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get better grades. Presumably this desire has some relationship to the other hopes we have described. Yet the teacher who has a more congenial and manageable group cannot necessarily count on greater school accomplishment. The friendship group that some teachers hold as their ideal may be more rewarding psychologically to individual students and yet not lead to more school learning. Friendship of itself does not guarantee that students will apply themselves to school tasks or achieve intellectually.

The process of selecting students for classes begins long before the teacher actually meets his students. There are four points at which selection occurs. The first selection determines which school-age children in the community will go to school. With younger children, social and economic selection is relatively ineffective. Most of these boys and girls are in school. But with every year of age, social and economic factors exert stronger pressure. Their influence is obvious in the schools of a large city. In Chicago, for example, the rate of turnover—that is, drop-out and replacement of students—ranges from 1 or 2 per cent to close to 300 per cent during a single school year. The way school-district boundaries are drawn may have a marked influence on the nature of the student body in a particular school. Maximum heterogeneity is obtained when a large central high school serves an entire metropolitan area; maximum homogeneity results when several smaller high schools serve relatively homogeneous neighborhoods.

The second point of selection is the division of the total school enrolment into large subdivisions. The most common division is by grade, which is roughly a separation by age with some modification, depending on promotion and performance. The division into various curricular tracks is also common, and division by ability seems to be increasingly popular. Another possibility is the division of a large school into several smaller schools, each with several hundred students and its own core group of teachers. It is possible to imagine a school that has no subdivisions, a school in which the staff studies

the entire student population in search of children who would profit from a particular classroom.

The third point of selection is the formation of classes. For my purposes, I shall think of a class as the collection of students assigned to members of the faculty. Typically, a class is a group of about twenty-five to thirty-five students assigned to one teacher for instruction in a subject. A class could be a collection of fifty students assigned to three teachers for instruction in several subjects. Or a class could consist of any other combination of teachers and students. In this sense, a class is an administrative unit, marked off by the assignment of responsibility to particular adults.

The fourth selection occurs when the actual instructional group within the class is formed. The instructional group is the particular congeries of students with whom the teacher is working at any particular time. This group may be, and too often is, identical with the administrative class; however, many kinds of subgroups can be formed to get a better organization of effort in various learning activities.

Last year, for example, fifty sophomores were assigned to three teachers for instruction in three subjects in the Laboratory School. Yet all fifty students were hardly ever brought together for instructional purposes. The instructional group seldom exceeded seventeen. For more than half the time, the students were working alone—in groups of two to four, in project committees of five to twelve, or in small classes (with the teacher present) of sixteen or seventeen. The entire group was assembled only when the students were to be an audience for the presentation of information, for stimulation by participation in a dramatic affair, or for participation in “town meetings” to consider the state of the Sophomore Project.

These, then, are the kinds of selections whose cumulative and successive impact determines the group toward which the teacher beams his educational efforts. In what follows, I shall be concerned primarily with processes of selecting students for classes and subgroups.

Several approaches to the problems of grouping are possible. I should like to think of these approaches as methods. In any actual situation, some combination of these methods will probably be used.

One approach emphasizes the fit between the teacher and the group. This approach is based on such findings as those of Battle, whose research showed that the greater the similarity between the value-attitude pattern of the student and the teacher, the higher the mark the student was likely to receive (1). The more expectations teacher and students have in common, for themselves and for one another, the more readily they can communicate with, relate to, and understand one another. This concept of fit is essential for the most effective use of teacher resources. If we assume that each teacher is most effective with a particular kind of student (or a range of kinds of students), his classes may well be composed only of such students. We refer to this approach as *teacher-class compatibility or congruence*.

In this method we would start by describing the various teachers to whom each student might be assigned for a particular subject. Then we would select the students most like a teacher in expectations, standards, and ways of working.

The second approach, which is included in the first, emphasizes communality or homogeneity within the student group. Ability groups, for example, are expected to be more homogeneous than random, or accidental, groups with respect to the criterion of ability employed. But with respect to other criteria, which may be more critical in actual classroom performance, ability groups are likely to be as heterogeneous as random groups.

Both approaches remind us that birds of a feather tend to flock together. The "feather" of communality is socially conditioned. It consists of shared values, shared backgrounds of experience, shared symbolic meanings of words, events, and stereotypes. (We are not including here similarity of temperament or of emotional response, in which opposites are frequently mutually attracting.) Since voluntary association occurs for personal reasons, we may assume—as

this approach does—that individuals are more likely to meet their personal needs with others who are similar to themselves socially. When such individuals work together, there is more likelihood of interpersonal trust and of development of a sense of common cause. There is less conflict over the definition of individual rights, justice, fairness, and other core propositions necessary for understanding and for co-ordinated effort. Because there is more unity, a greater diversity of individual needs and temperaments can be dealt with.

Almost intuitively we recognize the individual who is like us, who has the same background. We talk with him, confident that we will be understood. With him we can establish communication rapidly. He values what we value and rejects what we reject. We do not have to clear away a thicket of misunderstanding. He gives words the meanings we do. In brief, he shares our values and our concepts. We feel loyalty to those who have this sort of usefulness to us. The quest for belongingness is the search for such people (7).

A third approach, or method, is that of complementation, or combination. This approach takes account of differences rather than similarities among individuals. Johnny is threatened by one sort of person and supported by another. When he is with individuals who threaten him, he is inhibited or preoccupied with self. When he is with individuals who support him, he can channel his energy into work. Perhaps he has been raised, in gentle middle-class tradition, to feel anxious when hostility is expressed. He may feel considerable anxiety if Tom expresses hostility to the teacher overtly and intensely. Johnny's need to deal with this anxiety (or to withdraw) may very well use up a great deal of his psychic energy. Mary, on the other hand, may be able to show Johnny how to express hostility safely. Psychological complementation takes account of the facts about the threat and defense structures of students and their probable anxiety in reacting to situations that students are likely to encounter in their interaction with potential classmates.

The concept of complementation can also be applied to the job to be done. We assume that a group needs certain resources to do

a job and that the group should be assembled in such a way that the needed resources will be present. These resources may be thought of quantitatively and qualitatively. Quantitatively, for example, we may find that fifteen students can plan a physics experiment better than six students can. It takes that many students to dream up enough ideas to offer choice and stimulation. Qualitatively, each job calls for the ability to work with others and for certain skills related to the task itself. Any one task may require students who can provide the various functions of leadership, students who can reach out to others, students who can analyze and respond to ideas, and students who can stimulate others by introducing enough conflict to produce emotional involvement (2). The best group would be the smallest one which encompasses among its members the resources needed (8).

In each selection situation, all these approaches must be considered. It is probably not enough simply to see that each teacher has students he can relate to, or students who share similar values, or students who get along together, or students who have the necessary skills. For each purpose of grouping, some combination of these approaches will, we think, serve best.

A further and extremely important consideration is that we do not just group in general. We group for a specific situation, and each situation has its own cluster of requirements. We are trying to assemble students that Miss Jones can teach; Miss Jones teaches English; English has certain objectives; the course of study calls for certain activities; the activities involve a certain amount of teacher dominance, a particular set of expectations for overt participation, a specific set of demands for learning and for dealing with a defined body of information. To cite another illustration: A good group for Mr. Thompson, who teaches by the lecture method, may be quite unlike a good group for Mr. Brown, who relies mainly on discussion of topics he proposes to the class. The more completely we can define the situation for which we are grouping, the more guidelines we shall have to decide which differences and which similarities among students should be measured and taken into account.

The definition of the situation should include a number of specifications. How much and what kind of work is expected of students when they are working alone? In small groups? In the class as a whole? What kind of involvement does the teacher feel is necessary in his class? How intense an involvement does he want? What kinds of overt and covert participation does the teacher demand of students? What limits does he set to the expression of emotional impulses? How much control does the teacher expect students to show in their expression of hostility, dependence, affection? How much and what kind of structuring of the learning situation can be expected from the teacher? What does the teacher require in critical thinking and intellectual penetration of problems? The more precise our definition of the situation, the better we shall be able to decide what combination of approaches will be most effective for grouping students.

What information about students may be needed, whatever the methods we use for grouping? To explore this question, we must raise others.

First, what are the student's values and expectations concerning the situations he is to be grouped for? We have already said that a certain amount of agreement may be required between the student's value-attitude pattern and the value-attitude pattern of his teacher and his potential classmates. We have already noted that cultural homogeneity tends to reduce the static in communication and make it easier for the student to act to meet some of his needs. In short, where teacher and classmates share values and attitudes, the students find it easier to put themselves in one another's place, to strive for desired status, and to make intelligent choices.

Once the values of greatest relevance in each classroom have been identified, we can probably get the information we need on the student's values through such paper-and-pencil tests as the Allport-Vernon-Lindzey Study of Values.

Second, what is the student's standing with respect to the objectives of the course? What are his potentials in the subject? It is entirely possible to dismiss these as questions of ability. In doing so, we may discount them too much. However we define *ability*, it seems reasonable to want to narrow the range usually found in the unselected population of the school. In every situation, some students think faster than others; some make finer and subtler distinctions; some catch on more quickly. In short, it is assumed that the intellects of the students in any one class will be more effectively occupied more of the time if they have about the same horsepower and operate at about the same rate. But we sometimes overlook one important fact: many factors may determine the actual ability a student has in a certain situation. Intellectual activity is very much affected by social-emotional relationships and cultural orientations, for example.

Because of these complexities, I am inclined to prefer the concept of maturity and sophistication as a consideration for grouping; discipline rather than ability. An incident in the Sophomore Project, to which I have referred, illustrates my point.

The class had devoted three weeks to a unit on revolutions. The regular achievement test had been administered. The test got at facts about various revolutions, the general course of revolutionary movements, and other information usually covered in this unit in social studies. The tests were scored, and, of course, the students could be ranked on the basis of the results.

At the close of the unit, after the test, we showed the students a painting of a scene portraying an incident of the Russian Revolution, which they had not studied. We told them that the picture represented a moment in a revolution, and we asked them to write an account of what led up to it, what was going on now, and how it would turn out. Let's look at what some of the students wrote.

One girl identified closely with the "poor" people. They were "unfortunate," "unhappy," and downtrodden. Their fathers were in jail for not paying the dictator's exorbitant taxes; the mothers could

barely gather enough food for the little children; the brothers had been impressed into the army or into forced labor or they were hiding in the hills in danger of their lives.

Several other children wrote something like this: "These are a lot of angry, common people. They are milling around the palace of their king. The king is a good guy. He feels sorry and unhappy that things have taken this turn. He is an intelligent and fine man who wants to do right by his people. But he has been badly advised by his government." Here we see the rejection of the common herd, the identification with power, and the rationalization of failure by blaming it on others who are not identified as real people.

One response was very much unlike the others. It came from a boy who took one (and only one) look at the picture and wrote: "This is a revolution. There are four basic causes of revolution, social, economic, political, and religious. . . ."

There were many other themes. I gave the papers to the teacher and asked him who should get A, B, C, and so on. He could not answer. (Could you?) Yet it seems to me—and here is my point—that if I were the teacher, this is exactly the kind of information I would want to have about my students. What, to them, is the meaning of men's struggles as recorded in history? Do they identify with power? With the "downtrodden"? Can they bring these identifications under control through knowledge and facts? Do they have any sense of, or commitment to, causes? How maturely do they use these commitments and for what purposes of persuasion, analysis, or self-delusion?

What do we really mean by *ability*? What definition makes sense to a teacher who is trying to educate a particular group of children?

Third, with which teachers can the student identify? This question is based on an understanding on which most students of groups are agreed. That is, a collection of people becomes a group as individuals realize that they have something in common. In the classroom, the bond that students are most likely to perceive is their relationship

to the teacher. Their realization of a common need makes them kin. They all seek a relationship to the teacher. This is not to say that they all perceive one another as seeking the same kind of relationship. The communality is in the recognition of need and the striving to fill the need, not in the outcome hoped for. One student may be trying to relate to the teacher as a strong authority, another as a friend, another as a technical expert, another as one who has an occupation the student hopes to work at. Other students may be seeking help, stimulation, punishment, encouragement, dogmatic opinions, or reinforcement for pet prejudices.

The teacher's acceptance of the students' efforts to identify with him is, I suppose, the reverse process: that of identification with the students. But no teacher can accept an unlimited variety of efforts, and teachers—like other human beings—differ a great deal in the range they can accept. In other words, each teacher can, through his capacity for identification, encourage some students to identify with him. But he will probably block or resist the efforts of other students in this direction. It seems reasonable to suggest that we should try to discover this range of possibilities for each teacher and for each student in the population from which his class is to be drawn.

For this purpose a modification of the Guess-Who technique may be useful. In this technique people of different temperaments are described; the student is asked to select the description of the person he prefers. I would use descriptions that portrayed in general terms the teachers for whom the students are to be selected.

A fourth question may give us useful information for grouping: Who threatens and who supports each child? A child who must constantly be on the defensive, a child who must constantly be absorbed in working out problems of interpersonal relations, will not be free to work. The significance that this principle has for education is well illustrated in a little experiment we tried. The eighth-grade teachers were asked to select the five students who, in their opinion,

had most trouble and the five students who had the least trouble in getting along with the group. The ten students came to the laboratory one at a time, and each was given the same task: to look at a picture and point out all the mathematical ideas it brought to mind. Mathematics was chosen to lessen the likelihood that students could have picked up the ideas outside of class.

Jerry looked at the picture and identified the scene as a country store. After a long pause he continued: "We studied stores in class last month, and our teacher said that the storekeeper tries to make a profit." I asked Jerry how profit was calculated, and he gave me the formula. Gene began in the same way, by identifying the scene as a country store. After a much shorter pause, he went on: "If I were running that store, I'd want to make a profit." I asked him how profit was calculated, and he gave me the formula.

The question on calculating profit is the kind of question that may be found on achievement tests. Both students answered the question accurately. But what a difference in the meaning the picture had for each student: One boy could think about the store only in terms of cues that had nothing to do with commerce. He was unable to dissociate his mathematical ideas from the matrix of interpersonal relations present at the time of learning. He had to remind himself of the teacher, the time several weeks ago, the fact that they had studied stores. Only after these recollections could he get into the picture. The other student had made the mathematics his own as mathematics, and he was free to function directly without first unloading irrelevant but associated ideas. I called Jerry troubled in his social relations and Gene trouble-free. Using this sort of reasoning, I was able to guess correctly the teachers' appraisal of the adjustment of eight students. I interchanged the other two students.

The range of adjustment problems that can be allowed in a group depends on the teacher, for teachers differ markedly in their ability to give distressed children support and helpful feedback. Some teachers find it difficult to work with children who have certain kinds of maladjustment. It seems reasonable to try to keep children with such

problems out of the class of a teacher who is upset by them. Sociometric tests, observation of children, and projective tests are useful in identifying problems. In any case, it seems clear that we should strive to give each teacher such a combination of children that each child can free a high percentage of his energy for study.

Fifth, how does the child deal with stress in the classroom? Stress arises when the individual's usual habits and attitudes and purposes will not see him through when a new response is demanded. Any educational situation inevitably produces stress. How does the student deal with stress that arises from lack of structure or lack of definitions that are usually provided for him? For example, how does he respond to an ambiguous set of instructions for a paper he must write? Does he become angry and attacking? Does he seek out an authority figure or some other strong person to become dependent on? Does he seek out close friends, talk over his problem, and come to terms with his anxiety? Does he "deal" with stress by running away from it, escaping into fantasy, going to a movie, or falling asleep? Or does he try to understand the situation by diagnosing his feelings, analyzing the factors that caused them, and then deciding what conditions should be changed and how?

In our experiment, we put together a group of students, all of whom usually dealt with stress by taking flight. We compared this group to another group who responded to stress by seeking facts and comparing notes with classmates. The groups differed sharply in their performance on the same tasks. Differences pervaded every part of their discussion. The flight group refused to listen to the opinions of others in the group; their meeting dragged; they seized and accepted the first answer offered; they misunderstood instructions and had to have them repeated; they did not believe they would get the rewards the experimenters had promised. When they had finished their tasks, they bolted from the room. The responses of the other group were exactly the reverse (5).

How much homogeneity do we want in the way students deal

with new elements in a learning situation? It seems reasonable to recognize that teachers differ in their ability to resolve hidden conflicts in particular situations. We must recognize also that a teacher may have special difficulty in handling certain ways of resolving difficulties—fighting, for example.

But beyond these considerations, there are the demands that learning makes. A certain amount of conflict is probably necessary for learning. In social psychology, for example, where the content is close to self, the learner is generally torn by conflicting desires to run away (deny ideas), to fight (blame somebody), and to work (find out the facts). It probably helps the student to see others who may have less conflict act out these opposing tendencies. In observing classmates the student gets help in resolving his own inner conflict (3).

Teachers who want to teach through discussion should bear in mind that the dynamic of discussion is the arousing and the resolving of conflict (6). When every member of the class is content to depend on the teacher, it is difficult to have meaningful and involving discussion. There is not enough clash, provocation, and stimulation to stir the students to think for themselves. (The discussion will resemble many lecture situations.)

On the other hand, the teacher has to learn how much conflict he can handle. Suppose he makes an assignment that sets off a flurry of objections. "Do we have to do this homework?" one student asks. "Can't we do something else?" another wants to know. "Mr. So-and-so doesn't make this kind of assignment," one or two others protest. And still others ask endless detailed questions to clarify the task (or needle the teacher). Can the teacher deal with a wide range of reactions to his instructions? Or will he simply suppress the students' reactions and thus avoid both the emotion and the information the students are trying to communicate to him?

We may as well accept the fact that teachers differ markedly in their ability to cope with or accept various emotionalized ways of responding. We would be better off to stop criticizing and start

trying to find out what kinds of responses each teacher can handle, and use the information to help in selecting their students. Emotionalized ways of responding can be described, but not without effort, from projective tests.

Sixth, what kind of situation can the student deal with? What kind of situation is meaningful and challenging to him? What kinds of activities does he seek? We asked our students to rate about seventy kinds of activities they had taken part in. We wanted to know how much value the students attached to what they had done. Some students preferred activities that gave them a chance to work with other students; some selected activities that called for a close working relationship to the teacher; some made choices that permitted them to go off by themselves to prepare something for classmates to react to; others singled out for first preference "taking examinations" or "having the teacher crack down with discipline."

Actually the question we are asking here can be expressed quite simply: What are the students' goals and motivations? Here goals are defined as the quality of experience the child seeks. Our definition includes many dimensions—interpersonal, intellectual, active-passive, private-public, among others. If we also knew something about the kinds of activities a teacher stressed, we could estimate how much a particular teacher could help a particular student in his quest.

I doubt that there ever is a class where any student finds all activities worthwhile, but it seems reasonable to want to let each student spend as large a part of his time as possible on activities that are meaningful to him. The kind of information we need from the teacher may be obtained by talking with him, by observing him at work, and by studying his lesson plans. The kind of information we need from students may be obtained from questionnaires backed up by observation of their responses in a wide variety of learning activities.

Having identified these six kinds of questions, where are we now on the problem of grouping? If we can define the situations among which choice is available for each student, how are we going to put the six kinds of information together?

It seems unlikely that all combinations of the six dimensions will occur. Some patterns may exist, others not. A student whose values strongly support expectations of authoritarian leadership will probably (we would guess) turn out to be at one extreme or the other in his dependency, his identification with strong leaders, and the meaningfulness to him of teacher-directed activities. In other words, we would expect to find certain types of students corresponding in general to one of several patterns among the six dimensions. In this case, we would be concerned not with each dimension separately, but with how the dimensions go together—with the principle that organizes them into a pattern. For it is the whole child who reacts in class, not just his value-attitude pattern or his emotional-impulse pattern or his intelligence quotient. Can we find some organizing concept that characterizes the coherence among the child's thoughts, feelings, attitudes, relationships, and ambitions?

I believe the question is worth pursuing. The notion of types of children is common. Many teachers are aware of types. One elementary-school teacher I know divides her class into wrigglers and squirmers and feels they should be dealt with quite differently in class. Teachers stress other polarities: bright and dull; fluent and inarticulate; intellectual and practical. Or they may note whether children are especially sensitive to ideas, persons, or things.

These types are not determined on the basis of only one dimension. The idea of a type is an organizing concept for finding consistency among several dimensions. In the Sophomore Project, for example, we noted children who seemed to represent academic-dependent, social, and practical types. Some children who seemed to be an unclassifiable blend could deal with a wide range of situations; other unclassifiable children seemed unable to cope with any situation very well.

The academic-dependent child, as we saw him, expected his teachers to decide why he was in school, what content was to be covered, when tests were to be given, what standards of performance were to be expected, what activities the class was to engage in. He expected the teacher to structure content, performance, and activity—and to evaluate. Ask such a child, "How do you want to work?" and he asks that the teacher be in front of the class supervising at all times. If the teacher does all the child expects, the child may be a higher achiever.

The social type may be especially prominent in a coeducational class of fourteen- and fifteen-year-olds. No matter what the teacher plans, these children socialize. One queenly girl provided a vivid representative of this type. While the teacher was at the board trying to explain something to the class, the girl was having a lively eye-to-eye social session with six other students. Winking, smiling, grimacing, she was enjoying a highly active social life. Possibly we need to let this type socialize. They are going to anyway. But we could insist that they do their socializing in connection with subject content. With such students we could not expect schoolwork to be meaningful as schoolwork. For them, schoolwork is only an occasion for a kind of communication that seems very important to them—at least during this period of their lives.

We had two students who were practical types. These children did not seem to care much about people. For them, working with others on projects was a waste of time. These students felt that while they were discussing with others they were not doing anything important. They would rather read books, not for theories, but for facts. These children wanted to get their information themselves as quickly and as directly as possible without the intervention of other individuals. To them, the most interesting thing in the world was the world.

We are dealing here with patterns, with basic organizing themes that help us understand the six dimensions we have described. We do not know how these dimensions enter in to produce over-all types.

We will have to ferret out this information if we are to rationalize these observations into theory. Meanwhile, our practical hope is that we may be able to find such types and identify them directly. As a start in this direction, I propose that we turn to an interesting book on cultural anthropology.

Let me refer to *Varieties of Human Values* by Charles Morris (4). This writer—who has been studying cultures, American and others—has come up with the idea of “ways of life” or life styles. Each of us has his own way of life, his own style, which involves a certain expenditure of energy, a certain amount of openness to others, a certain amount of selfishness and enthusiasm. Morris believes that many life styles are possible. But what I like about Morris’s ways of life is that they represent coherent patterns. The reader cannot pull out one idea and point to it as the essence of a way of life. It takes several ideas to form a pattern, and yet the reader feels that at some deeper level of recognition these ideas belong together. Here are parts of Morris’s descriptions of two ways of life:

Self-control should be the keynote of life. Not the easy self-control which retreats from the world, but the vigilant, stern, manly control of a self which lives in the world, and knows the strength of the world and the limits of human power. The good life is rationally directed and holds firm to high ideas. It is not bent by the seductive voices of comfort and desire. . . [4: 15].

Life is something to be enjoyed—sensuously enjoyed, enjoyed with relish and abandonment. The aim in life should not be to control the course of the world or society or the lives of others, but to be open and receptive to things and persons, and to delight in them. . . . To let oneself go, to let things and persons affect oneself, is more important than to do—or to do good. . . [4: 19].

Each of these ways, then, is a possible nexus for the organization of personality—for an approach to people and to experience. Perhaps we can write descriptions—not so high flown and fancy as these—and ask a child which description best describes himself. We can put the same request to his peers and his teachers. Their responses could be used in forming groups. Presumably the groupings would be homogeneous enough to encourage security and ease of communication but heterogeneous enough to encourage some clash. How much ease?

How much clash? The proper blend would depend on the kind of interpersonal dynamic the teacher tends to use in his classroom. It is even possible that some teachers may want some clash between themselves and their students—teachers, for example, who see discussion as a battle of wits (?) with the class. The questions on homogeneity, complementation, and compatibility apply not only to each of the six dimensions described here but to the general way of life.

We believe that it is worthwhile to strive for teachable, manageable, work-oriented groups. We think it is possible to compose the class group in such a way that it—rather than the gang, the family, or some vague mixture of these—becomes the student's reference group. If we understand correctly the implications of the present concepts of reference groups, students' motivations and strivings would be released in the classroom and could become part of participation in activities for the purpose of learning. This outcome is, of course, speculative.

But even if we had such groups, would school achievement be greater? According to several studies of methods, the answer is not necessarily yes. The answer probably depends on what the teacher does with the group, that is, on the method of teaching. For example, it seems unreasonable to suppose that a teacher is likely to produce greater achievement if he uses the same methods, the same ways of making assignments, and the same ways of challenging the students, regardless of the kind of group he has. We should expect more achievement if the teacher fully understands and takes account of the way in which each group operates and inquires. We may expect more achievement if the group is selected partly on the grounds of its probable success under a described method.

In brief, carefully considered grouping plus appropriate methods for each group is far more likely to produce increased achievement than grouping designed simply for increased manageability or comfort.

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## *Broadening the Base in Evaluation*

This is a time of crisis. Rapid changes are sweeping across the social scene. The pace of technological development is quickening. Enormous international problems coupled with the threat of nuclear war hang over the peoples of the world.

These facts make it urgent that we improve our educational programs and adapt them where necessary to meet the needs of our time. In developing and improving educational programs, systematic evaluation procedures are essential. We cannot expect to improve significantly on what we are doing in our schools unless we can obtain information on the results of our efforts. Evaluation techniques, properly used, will be of great value for this purpose.

Although the importance of evaluation seems to be widely accepted among educators, systematic evaluation is seldom a main component of the process of curriculum development and improvement. Let there be no mistake about it, however. Schools are being evaluated. Today, as always, the schools have many critics. Some object that the schools do not meet the adjustment needs of youth. Others protest that the schools do not stress the mastery of subject matter. With few exceptions, the charges are made without the benefit of anything resembling adequate evidence on the achievements of the educational programs under attack or the advantages that could be expected from the changes proposed. In view of the many pressures on the

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school, the dearth of adequate evidence, and the conflicting opinions as to the outcomes of instruction with this or that emphasis, the need for sound evaluation studies should be obvious.

It is probably desirable at this point to define the term *evaluation*, since it is used in a variety of ways. "Evaluation designates a process of appraisal which involves the acceptance of specific values and the use of a variety of instruments of observation, including measurement, as the bases for value-judgments" (1). In other words, evaluation is a concept broader than measurement or testing. Evaluation involves collecting and analyzing whatever kinds of evidence are obtainable and pertinent to the matter under study.

The writers consider the approach described by Ralph Tyler as the most adequate rationale available on curriculum building and on the relation of evaluation to curriculum development (2). This rationale consists of four major phases: determination of objectives, design of learning experiences, organization of learning experiences, and evaluation.

One of the most important features of this rationale is that it represents a recurring cycle. Objectives provide guidance for designing and conducting learning experiences and for organizing learning experiences. Evaluation (based on the objectives), in turn, provides a feedback of information for improving the objectives, the learning experiences, the organization of learning experiences, and the evaluation procedures themselves.

Do the stated objectives provide an adequate basis for evaluating an educational program? This article explores the logical consequences of the answers to this question and the suggestions they offer for the planning and the conduct of evaluation studies.

Tyler's answer to our question is clearly no. He writes: "... the same learning experience will usually bring about several outcomes. Thus, for example, while the student is solving problems about health, he is also acquiring certain information in the health field. . . . Nega-

tively it means that the teacher must always be on the lookout for undesirable outcomes that may develop from a learning experience planned for some other purpose" (2: 43-44). Later, Tyler asserts: "Eventually, parents have a right to know what kind of changes are being brought about in their children" (2: 81).

Tyler is saying: even when objectives are achieved as planned, unplanned results occur. If the desired learning outcomes fail to materialize from a learning experience, it should not be assumed that no learning took place. Learning of some kind is likely to result from any kind of experience.

Unplanned effects are sometimes as significant as attained objectives. A student in a history course, for example, may be developing an interest in history, as expected—but he may also be developing an interest in political science. The same student may be learning to think more logically. The teacher's comments on his statements in class, on his examination papers, and on his project reports may all help give a more logical turn to his thought. Such a change could come about even if the teacher was not trying to achieve objectives in the area of logic.

Not all unplanned learning is desirable, however. A mathematics student may learn such a distaste for mathematics that he avoids any activity involving the subject. The distaste may develop whether or not the student acquires the knowledge prescribed. One purpose of literature courses is to teach appreciation of literature. Yet many students emerge from courses in literature with a strong dislike for the subject. Unfortunately, such attitudes are often retained longer than the factual knowledge or the understandings gained in the course.

Clearly there is food for serious thought in Tyler's assertion that parents have a right to know what is happening to their children in school. If we accept Tyler's assertion, the school program should be evaluated, not only in terms of stated objectives, but also in terms of unplanned outcomes. Of course, the school is obligated to inform its patrons and the community of the extent to which school objectives are being achieved. But, if ways could be found for doing so, is not the

school obligated, even before answering the question about objectives, to answer the broader question: "What are we doing to students?"

When parents send their child to school, they may ask themselves: Is the school causing the child to like school or to dislike school? Is the school causing him to develop the notion that intellectual activities are for "squares"? Is the school causing him to suppress his initiative? Is the school contributing to the development of a distorted self-concept or bringing about other consequences detrimental to sound mental health? These are only a few questions that parents may ponder.

The answer to the question "Is the school achieving its objectives?" can, of course, be obtained from the answer to the question "What are we doing to students?"

But what basis are we to use for evaluating unplanned effects? What are the criteria or values against which the evaluation can be made? When we evaluate according to the more traditional concept, objectives provide the criteria. What is to take the place of objectives when we evaluate unplanned effects of an educational program?

To answer the question, it is necessary to refer first to a broader set of values, that is, the core of values of those in control of the school and the concepts that derive from them, such as the general purposes of the school. We believe that the school program as a whole, as well as student achievement and other changes that occur in students, should be evaluated, not merely in terms of stated objectives, but also in terms of these core values, general purposes, and other concepts derived from them.

What is meant by the "core values of those in control of the school and concepts that derive from them"? We can get a fairly clear idea by listing the kinds of information needed to understand fully what a particular course of instruction is supposed to accomplish. This information would include:

The core of values held in common by those in control of the school, values expressed in such statements as these, for example: "A man should provide for his family." "A child should respect his parents."

The stated or generally understood purposes of the school, such purposes, for example, as the following: "The school should offer experiences that will help

the child be a better citizen." "The school should help the child develop wholesome uses of leisure time."

The general objectives of the department or grade. For example, statements in a course of study as to the general objectives to be achieved in the English department in a high school or in arithmetic in the primary grades.

The specific objectives of the individual course or unit, that is, changes of behavior that are expected as a result of a particular course or unit.

Evaluative criteria derived from objectives. Evaluative criteria are stated in terms of a description of a situation or problem and the kind of responses that a student who has achieved the objective should make to the situation or the problem. It is often unnecessary to formulate all the evaluative criteria derivable from the stated objectives. A representative sample is usually sufficient. The kinds of learning activities to be provided and the kinds of learning materials to be used.

Elements of evaluation instruments and procedures, such as test items, rating-scale categories, and lists of behavior for direct observation. These are ordinarily based on evaluative criteria or objectives or both.

The question may be asked: To know fully what a course is supposed to accomplish, why is it necessary to have information on the learning materials and the test items to be used? Objectives are usually worded in more general terms than those used in learning materials and test items. For this reason, it is nearly always possible to use a wide variety of learning materials to achieve a given objective. Hence, the specific manifestations of the behavior changes implied in the objective may vary considerably, depending on what learning activities and learning materials are used. It is important to add that not only does the information in the learning materials give more meaning to stated objectives, but this information is needed in constructing test items and other evaluation devices. It is seldom possible to prepare these devices with the exactly appropriate shades of meaning unless one has access not only to lists of objectives but to course plans and instructional materials as well.

This analysis shows clearly the importance of the context of stated objectives. By themselves, objectives provide only partial clues to what is intended. Full meaning can be given to objectives only if we have, not merely the evaluative criteria, instructional materials, and test items pertinent to them, but also information on the general

objectives of the grade level or department, the general purposes of the school, and the core of values of persons who influence school practices.

The exact nature of the outcomes of learning experiences cannot often be correctly anticipated. The basis for evaluation, therefore, must be as nearly all-encompassing as possible. No matter what kind of outcome results, if it is to be evaluated, there must be a standard or value of some kind to relate the outcome to. Clearly, the only basis broad enough for this purpose is the core of values of those in control of the school. Even the general purposes of the school may not be broad enough. Conceivably, some outcomes may not fall within the scope of these purposes.

Consider the following example. The purposes of many schools do not include instruction in matters of religion. It is possible, however, that teachers may influence students' attitudes toward religion merely by occasionally expressing their own attitudes. If the changes in student attitudes happen to be opposed to those generally held in the community, an evaluation would surely take place, not in terms of school purposes, but in terms of value systems. Thus, no matter how objectives are stated, objectives alone cannot provide an adequate basis for evaluating an educational program; for they do not represent all the logical consequences (things that happen or may happen in school) that can be derived from the values held by those in control of the school.

Of course, if we try to assess all the unplanned effects of an educational program, in terms of all the values of those in control of the school, we face an impossible task. Lest adequate evaluation seem too onerous, let us bring the concepts of *hypothesis* and *selective sampling* into the discussion. With these concepts, the process of evaluation by the proposed approach can be little, if any, more difficult than the usual approach.

We propose that, as a basis for comprehensive evaluation in an educational program, the concept of *hypothesis* is more suitable than the concept of *objective*. After all, are not educational objectives

actually hypotheses as to what will result from a school program? Educational objectives are quite suitable as hypotheses except that they are restricted to outcomes that are intended.

A full basis for drawing up specifications for instruments and procedures for evaluating an educational program should include not only the hypothetical outcomes that are intended (objectives) but also outcomes that might unintentionally result from instruction.

The following are examples of the kinds of hypotheses that might be investigated in a particular course:

The students are mastering the factual knowledge and the skills expected in that grade.

Much factual knowledge acquired by the students will be forgotten soon after they complete the course.

The students have very little understanding of how some skills they are learning are to be used.

Some students are acquiring more interest in the subject.

Some students are developing a strong dislike for the subject.

A few students are developing a dislike, not only for the subject, but for the teacher and for school as well.

The students are acquiring more effective study habits.

A few of the more able students, as well as many slower ones, are developing a feeling that the subject is so difficult that it is completely out of their reach.

How do we obtain hypotheses? The answer is no different than for any scientific inquiry. Hypotheses are obtained wherever they can be found. Let us suppose that an evaluator is trying to help a teacher apply this approach. Even though the teacher may say that she does not have a single formally stated objective, they discuss what the teacher is trying to do in the course. By examining textbooks, reference lists, and other instructional materials, the evaluator can formulate hypotheses as to possible outcomes. Perhaps the best way to obtain hypotheses is to attend several of the teacher's class sessions.

Interviews with students are another excellent source of hypotheses. Observing students out of class and reviewing students' responses to the teacher's evaluation devices offer two more possibilities, and there are no doubt other good sources.

The concepts of hypothesis and selective sampling can save work.

Here, as in any scientific investigation, it is not necessary to test every conceivable hypothesis. Rather, we may select hypotheses to investigate, much as we select the sample of objectives to be covered in an examination. In selecting hypotheses, the following criteria should be used:

The importance to the objectives, the general purposes of the school, and the core values of those in control of the school.

The requirements for an adequate sampling of student behavior patterns that are related in an important way to the instructional program in question.

The feasibility of testing the hypotheses with the instruments and procedures available.

The willingness of the teacher and other school personnel to have the hypotheses tested—that is, the presence or the absence of threat in the hypotheses.

One of the most important advantages of the proposed approach lies in the flexibility it permits in the selection of hypotheses. By including both planned and unplanned outcomes in the hypotheses to be considered, a wider range of choice is provided. The proposed approach implies that no single educational outcome “must” be evaluated. There are many possible starting points in the building of an evaluation program. Hence, the feasibility of testing a hypothesis and the particular biases of the teachers concerned in an evaluation program both constitute realistic and desirable criteria for the selection of hypotheses.

Flexibility is desirable also in the process of testing hypotheses. This idea may conflict with the thinking of individuals who believe that clarification of objectives is the first step in any properly conducted evaluation of a school program. Tyler explains why this belief is not necessarily correct:

Another question arising in the attempt at curriculum revision by a school or part of a school is whether the sequence of steps to be followed should be the same as the order of presentation in this syllabus [objectives, learning experiences, organization of learning experiences, evaluation]. The answer is clearly “No.” The concern of the staff, the problems already identified, the available data are all factors to consider in deciding on the initial point of attack [2:83].

The foregoing statement points up the close relationship of the evaluation process to scientific method. The evaluation process, like

scientific problem-solving, can be entered at several different points. Moreover, the need for shuttling back and forth from one step to another in the process is frequently apparent.

To clarify further the nature of the evaluation studies that have been suggested, we shall sketch how a study might be conducted. Suppose that a specialist in evaluation is working co-operatively with a teacher of ninth-grade social studies on the task of evaluating the course. That is, they are applying evaluation techniques to find ways to improve the course.

The teacher is unsophisticated in methods of evaluation. The evaluation specialist has offered to help the teacher, or the teacher has come to him for help. The two discuss how they should proceed. Perhaps the most important point the evaluation specialist should make in this discussion is that he has techniques at his disposal through which he can obtain information for the teacher, information that will be of value in discovering ways to improve instructional methods and materials. The evaluation specialist should make it clear that all findings will be kept confidential and released only at the teacher's suggestion.

Next the evaluation specialist, with the help of the teacher, canvasses all available sources that might suggest hypotheses as to the status of student behavior, or changes in student behavior, in the class. He asks the teacher to describe her purposes, methods, and materials; and he investigates the other sources of hypotheses mentioned earlier.

The evaluation specialist consolidates ideas on hypotheses and states them clearly. These hypotheses can be stated and analyzed by means of the type of content-behavior classification recommended by Tyler (2: 30-40) and Bloom (3) for studying educational objectives.

Next the teacher and the evaluation specialist together select the hypotheses to be tested, using the criteria we have listed. Having selected the hypotheses, they go on to select or develop the instruments and procedures needed to test the hypotheses. The evaluation specialist should have a carefully assembled collection of instruments

and procedures which can be drawn on as needed. Some may be appropriate to use without change. Others may have to be adapted for the project. His collection might include:

A pool of test items, with a large number of items in the subject-matter area, items appropriate to the age level of the students.

Standardized tests, or portions of tests, appropriate for the course.

Sample attitude questionnaires or opinion polls and perhaps a pool of individual questions appropriate to the subject and the age level of the class.

Sample rating forms and behavior checklists.

Sample interview schedules that can be adapted for use with pupils, parents, or community members.

Schemes for obtaining and processing anecdotal records.

Sample self-evaluation forms for students.

After the appropriate instruments and procedures are applied and the results obtained, the teacher and evaluation specialist should evaluate the data. It is important that they analyze the data together, if at all possible. As they discuss the results, he helps her select courses of action, insofar as his qualifications permit. For example, he helps her discover the implications of the results for improving her teaching methods, for revising statements of purposes, and for relating instruction more closely to purposes.

Finally, the evaluation specialist offers to work with the teacher again to help her prepare to use the techniques on her own. Or he explains how she can obtain continuing assistance in evaluation from other sources.

The procedure outlined here is an application of the approach to a particular situation. The steps listed need not be followed in a rigid sequence. They do not necessarily apply in the same way to all situations. The steps simply point the way to what needs to be done.

The approach described here, it is hoped, will increase educators' acceptance of systematic evaluation as a functional part of the process of planning and improving educational programs.

Anyone who has worked extensively in the field of educational evaluation knows that educators are often reluctant to take all the steps necessary for effective evaluation studies (4). One suggestion

in particular is not always welcomed—the suggestion that the first step in evaluation is to improve statements of objectives. Some educators do not even believe in setting up predetermined objectives.

In this connection, we might use a somewhat over-simplified device for depicting various philosophies of education—a continuum of educational philosophies. At one extreme, we might place the philosophy of certain religious seminaries where the objectives are largely predetermined and essentially uniform for all students—at least sufficiently uniform that all graduates emerge as emissaries of the same faith. At the other end of the continuum we might place the philosophy of Earl Kelley, who stoutly maintains that there are no “essentials” in education (5). Tyler’s rationale seems to lie somewhere between these two extremes. While he emphasizes the importance of objectives, he recommends student participation in planning (2: 67).

We can see that, at some points in the continuum, a recommendation to improve statements of objectives might fall on deaf ears. For example, it would probably be easy to find a professor of literature who would maintain that he could not possibly “dictate” what students should get out of his course. Appreciation of literature, he would say, is a personal affair. The best the instructor can do, he would insist, is to be an aide or catalyst in the process. Such a professor would probably object to being told that careful delineation of objectives must be the first step in improving his course. Yet he might want to know what changes take place in the students who attend his classes. It is difficult to imagine a teacher of literature who, for example, is not interested in the changes in reading habits that took place in his students during and after his course.

To such educators, the proposed modified approach to evaluation might be more acceptable than the more usual method of concentrating first on objectives. With the modified approach, the teacher is free to use or dispense with formally stated objectives. If he decides to use objectives, they may be stated in any style the teacher prefers. Thus the success of an evaluation study need not hinge on the adequacy of the formulations of objectives. When the modified approach

is used, the evaluation process can be started at a point closer to the phase of the cycle where useful feedback information is available. With this approach, it is not necessary to start with the difficult process of resolving differences between philosophies—educational philosophies and philosophies of life. The approach makes it possible (as far as evaluation studies are concerned) to by-pass the thorny problem of working out disagreements as to whether objectives should be expressed in terms of changes in behavior or in some other form. With this approach, we can evaluate a program without first arriving at a consensus or a compromise on objectives. We need not reach an agreement as to which objectives are desirable and which are important enough and realistic enough to be included in the curriculum. All these steps (and more) are necessary for selecting objectives that are suitable as a base for evaluation.

In other words, with the proposed approach, evaluation efforts would seem useful and rewarding sooner than with the more traditional approach. Purposes can be clarified gradually, as evaluation and course revision progress. Moreover, when the results of evaluation studies are available, it is easier to clarify purposes than when discussion proceeds on the basis of logical analysis alone.

Information on what outcomes are actually being realized would have many uses in curriculum development. We need to identify the patterns of behavior (or better still, the changes in behavior) of students who have had certain learning experiences. With this information, it should be possible to draw inferences on how learning experiences should be altered to more effectively produce desired changes in behavior. Furthermore, by studying important shifts in behavior patterns that result from modifying the organization of learning experiences, it would be possible to determine the suitability of various organizational schemes.

The teacher who wants to improve instruction should, therefore, find the approach helpful. She could get some guidance on how to proceed if she knew only the extent to which the objectives had been achieved or if she knew that the objectives had not been achieved

at all. But if the teacher could be informed of a wider range of the actual effects of the teaching procedures she used, she would have a sounder basis for determining what to do next. Information on this wider range of effects would permit identification of a richer variety of relationships between her actions as a teacher and changes in the students. With this richer source of information, the teacher could more readily gain insight into cause-and-effect relationships in teaching-learning situations and thereby learn more quickly how to influence learning so as to achieve desired results.

In other words, the teacher who tries a teaching procedure aimed at achieving an objective only to have her attempt fail as a procedure, should get more insight into the teaching-learning process if she knows not only that the attempt failed but also what effects the attempt did bring about.

This knowledge is very important, for many teachers find it difficult to acquire a functional understanding of how to change student behavior by structuring learning situations. Even if teachers fully accept the premise that objectives must become the basis for instruction, it is still most difficult for many teachers to act in accord with this new understanding. The stated objectives, therefore, may often be poor guesses as to the actual outcomes of instruction. It should not be surprising, then, to find discouragingly little progress toward objectives in many cases—a finding that in itself provides little help on what to do to bring about improvement.

A boy learning to drive a nail must see the effects of his blows if he is to correct his aim and hit the nail squarely. So a teacher must know the effects of her teaching efforts. It is not enough for the boy to know that in his last trial he missed the nail: he must know where the blow fell with relation to the nail. Similarly, it is not enough for the teacher to know that a certain teaching effort failed. She must be able to determine what actually resulted from her attempt and how these results are related to her purposes and her values concerning education.

The proposed approach for evaluation has many implications. We have described some of the implications for curriculum improvement.

We could look at implications for teacher-preparation programs, for in-service education programs, for action research, for test construction, for taxonomies of educational objectives, and for applications outside the school. Analysis of these implications has been omitted here to permit a detailed description of the approach itself.

A broad base is needed to evaluate an educational program properly—a base broader than the stated objectives of the program. The fact that learning experiences have many outcomes, some of which are unplanned, makes objectives alone an inadequate base for evaluation.

The broader base suggested here is a set of hypotheses as to outcomes (including objectives) that might be expected from the learning situations experienced by students. The hypotheses selected for investigation would be those related in an important way to the purposes of the school or to the value systems of those who control it.

The starting point for improving an educational program through evaluation is not necessarily clarification of objectives. The cycle of defining objectives, designing learning experiences, organizing learning experiences, and evaluation may be entered at various points.

This approach has two major advantages. It could give systematic evaluation greater appeal for educators. It would give teachers and school officials a richer source of information on the impact of instruction on students.

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## *Psychiatric Needs of Graduate Students*

We need a better understanding of the psychiatric needs of graduate students. Efforts to gain this understanding emphasize the common concerns of education and psychiatry. One goal of each of these fields is to free the capabilities of the individual by helping him overcome the handicaps of misconceptions or limited knowledge.

In recent years, more and more educators and psychiatrists have realized the value of working together. The result is a growing understanding of students of all ages. Many universities regard it important to offer students an opportunity to resolve personal problems. These universities make therapy readily available by providing a psychiatric staff. Of course, the basic function of a university psychiatric clinic is to give therapy to students who need it. However, the treatment of individuals can give us a valuable over-all look at student needs.

A significant portion of university students have symptoms that point to a need for psychiatric care. There are signs that, in ways short of disturbing symptoms, graduate students themselves sense a need for greater self-understanding. In a recent annual report, Dean Elder of the Harvard Graduate School of Arts and Sciences referred to a questionnaire sent to recent graduates to get helpful criticism. Fifteen hundred replies were returned. The responses stressed an area important to both education and psychiatry: "Through the pages of the answers comes repeatedly the theme of the graduate student's lack of self-confidence—all sorts of signs to suggest that we almost seem to have encouraged immaturity during the years spent here rather than to have fostered a growing self-dignity and ripe poise."

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Many circumstances limit the educator who is striving to accomplish certain goals. Psychiatric problems can limit a student's response to the educator's efforts. One of the most important roles of psychiatry, as it relates to education, is to help remove some of these barriers.

Education deals with knowledge in its broadest sense. Psychiatry deals with knowledge of self, appropriately called "insight." At times, important insights may be gained directly and understood clearly. But often there are impressions or feelings that are hard to "know" in a conventional sense.

Self-understanding is very important for anyone who is trying to help others develop. To the psychiatric therapist, self-understanding is essential. We no longer educate psychiatrists by simply exposing them to mental disorders. Today the education of a psychiatrist involves a much more extensive preparation that includes training aimed at giving him a maximum of self-knowledge.

Like the psychiatric therapist, the teacher has a special need to understand himself. Few outside the family unit wield as great an influence on the maturing individual as the teacher. In an article entitled "Emotions and Learning," in the Spring, 1955, issue of the *Harvard Educational Review*, Dr. Dana Farnsworth listed ten concepts "valid in psychiatry and useful to teachers." He made the following concept Number One on his list: "The teacher should know himself well, accept his own shortcomings and determine to overcome them when possible, and be able to recognize in himself when emotions begin to displace reason. In this way he should not have to work out his own problems at the expense of his students."

It is traditional to think of the health needs of university students in terms of the average college student who is usually in his late teens or early twenties, fresh from home or from the protective atmosphere of a preparatory school. The health problems of this student are usually typical of late adolescence and early adulthood. However, a high proportion of students who require the services of a university

health unit are graduate students. An increasing number of American universities offer opportunities for graduate work. At Harvard University, graduate students make up slightly more than half the total enrolment. In many universities, graduates make up as large a share of the total number of students.

Graduate students are, for the most part, well into their twenties. They have little in the way of "adolescent turmoil." Most of them have had the opportunity to make many independent decisions. Many have decided on a vocation, and an increasing proportion are married and have children. The needs of the graduate student often receive less attention from the university than the needs of the undergraduates do. Outstanding in this respect are housing and funds to finance study.

Psychiatry has special importance for graduate schools. Often the student in these schools is preparing for positions in society where he will exert an important and formative influence on others. Many are preparing to become teachers. Not all prospective teachers are enrolled in the graduate school of education; many students in other graduate schools also go into the educational field.

The graduate students chosen for our study were enrolled in the Harvard Graduate School of Arts and Sciences. They had been seen by University psychiatrists during the course of an academic year. This group was chosen for several reasons. The students represented many fields of graduate education. The enrolment of the School is large enough to allow significant findings. More than half the graduates fill important teaching roles upon receiving their degrees. During the year covered by the study, 57 per cent of those who received a Ph.D. or S.D. degree entered the educational field. The areas of study in this School fall into three major divisions: natural sciences, social sciences, and humanities. The subdivisions in each of these fields offer studies that have a direct, practical application as well as studies of a more general and abstract nature.

The Graduate School of Arts and Sciences has no special medical

unit but shares psychiatric facilities with the College and five of Harvard's nine other graduate schools. For the year studied, this student body, which numbered about eight thousand, was served by two full-time and three part-time psychiatrists. The University routinely issues general announcements of availability of total health services. No special effort was made to acquaint the students included in the study with the psychiatric facilities of the University.

The Graduate School of Arts and Sciences had an enrolment of 1,490 students. Of these, one hundred were seen by the psychiatric department. All but three students interviewed had symptoms that required evaluation and therapy. These three students came for help with administrative matters related to illness or for advice for another person. About a quarter of the students did not have a well-established mental illness in the conventional sense and were placed in a "problem" category. This classification was established for students whose psychiatric needs were not severe and usually related to specific and clearly seen circumstances.

None of the students who had a "problem" showed evidence of long-standing symptoms or personality disturbances that were severely incapacitating to the student or threatening to his total adjustment. In contrast to this less severe form of psychiatric need, about half of the students interviewed had clearly established psychoneurotic symptoms. In this group, anxiety reaction was the largest single diagnostic category, with depressive reaction a close second.

The students were referred for psychiatric interviews in a variety of ways. Sixty-five were self-referred; nineteen were referred by the University Medical Department; eleven by faculty members or administrators; and five by a friend or a member of the family. The proportion of students who were self-referred and those who were referred by others was essentially the same in all the major diagnostic categories. Regardless of the manner in which the students were referred, most of them comfortably accepted psychiatric evaluation and moved into therapy with little difficulty.

For most of the students interviewed, it was possible to estimate

the effect of their psychiatric problems on studies. The total findings were as follows: nineteen students were severely incapacitated; twenty-six were moderately incapacitated; thirty-six had minimal incapacity; seventeen had no incapacity; and for two there was not enough information to make an estimate. No diagnostic group was associated with an unusual amount of incapacity other than the expected severe incapacity of those who had a psychotic illness. (Five students had a psychotic disturbance.) When a problem interfered with studies, there were usually other disturbed areas in the student's life. A few were able to continue studies without interference, despite severe symptoms affecting other life adjustments.

It is difficult to estimate accurately the benefits that each student received from treatment. Many students were seen briefly, and adequate follow-up was not uniformly possible. However, it was possible to make a general estimate of benefit, especially as it was reflected in academic work. Eleven students received considerable help from therapy, fifty-seven a moderate amount of help, nineteen a minimal amount, nine none; on four no estimate could be made. Among those who received no benefit from treatment, a severe resistance to therapy was frequently apparent. There was remarkably little variation among the diagnostic groups in the degree of benefit from treatment. One student who had a psychotic illness showed marked improvement.

The average number of interviews for each student was five. Each diagnostic group showed some difference from this mean. The range extended from two interviews for those who had a psychotic illness to six for those who showed psychoneurotic symptoms. Students who had a psychotic disturbance usually had only an evaluation, which was followed by arrangements for appropriate treatment. Students who showed psychoneurotic symptoms required the greatest number of interviews for evaluation and therapy. Some students were seen throughout the academic year.

Seventeen of the hundred students studied required more psychiatric care than was available through the University facilities. As

would be expected, four of the five with a psychotic illness required special treatment not available at the University. Ten students with psychoneurotic symptoms required more intensive treatment than was available through the University psychiatric staff. When the student was helped to obtain outside psychiatric care, it was usually essential for the student's general welfare and his adjustment to the University. Other students, it was believed, would have benefited from more intensive therapy. However, several factors made additional interviews difficult to arrange: the heavy load of the University staff, insufficient funds for private therapy, difficulty in placement in public psychiatric clinics, and lack of sufficient motivation for therapy.

A superficial look at the psychiatric care of graduate and undergraduate students indicates great similarity. The proportion of students who have psychiatric interviews and the mean number of interviews for each student are remarkably similar for the two groups. This similarity may be influenced by the number of available psychiatric hours. During most of the year, the staff was able to see only students who were most in need, and they were seen for a minimum number of interviews. It must be remembered that the findings of this study reflect the students' needs during one academic year. A more recent study has been made of the needs of students from Freshman year in college through the years of graduate education. The basic finding of this study is that roughly a fifth of the students seek psychiatric help at some time during their undergraduate and graduate years.

Data on diagnosis and manner of referral for treatment showed significant differences between the undergraduate students and the graduate group. There was a proportionate incidence of many diagnostic categories. However, there was a significant difference in the number of students who were diagnosed as psychoneurotic and those who were seen for "administrative and information" reasons. The graduate group had 25 per cent more psychoneurotic illnesses, and 21 per cent fewer were seen for "administrative and information" reasons.

These differences indicate that when a student reaches the age of graduate study he is much less apt to involve others, such as university administrators, in matters related to his psychiatric need. The differences also point to a need for more therapeutic interviews with graduate students. Most interviews for "administrative or information" reasons require relatively little psychiatric time, important as the interviews may be. Therapy for clearly established psychoneurotic conditions is at the other extreme; it usually requires many interviews and, at times, protracted and intensive therapy.

The differences in the manner of referral were in keeping with the diagnostic differences. Sixty-five per cent of the graduate students were self-referred, in contrast to only 33 per cent of the college group. This difference indicates the graduate student's greater awareness of psychiatric need and his ability to take an appropriate step for treatment on his own initiative.

Faculty members, administrators, and members of the general medical staff, as well as the University psychiatrists, hold various impressions as to what characterizes students who need psychiatric care. Frequently the impressions originate from observations of a mentally ill student who was different in some dramatic way from the "average" student. Impressions may stem from symptoms observed in a student who had an unusual academic background or was pursuing an unusual course of study. When information for comparisons was available, the students of this study were compared with the total enrolment of their graduate school. Such comparisons could help disclose whether some aspects of graduate status were associated with, or predisposed a student toward, psychiatric symptoms.

The students in the Harvard Graduate School of Arts and Sciences represent a variety of undergraduate backgrounds. Many colleges send only one student to this school, while others regularly send many students. The patients and the total student body were divided into the following groups: from colleges sending one representative, from colleges sending two to four, from colleges sending five to fif-

teen, and from colleges sending over fifteen. The patient group was found to be directly proportional to the total student body in all these categories. Thus, whether the student came from Colorado College, which sent one student to the school, or from Harvard College, which sent 258, there was no greater or lesser likelihood of psychiatric disturbance.

It is commonly thought that some fields of study attract students with psychiatric problems. To test this impression, the patient group was compared with the total enrolment. The number of patients in each major division of the School (natural sciences, social sciences, and humanities) was directly proportional to the total student body in these fields. Comparisons were also made in terms of the popularity of various subfields of study. Subfields were divided into three groups: those that had fewer than twenty students, twenty to fifty students, and more than fifty students. The patient group in each division was directly proportional to the total student body. The findings suggest that there is no general relationship between incidence of psychiatric difficulties and area of academic interest.

In the school studied, there is opportunity for considerable variation in the amount of time a student takes to complete his graduate work. Extremes range from one or two years to eight years or more. It is often thought that students who greatly prolong their years of graduate study are inclined toward psychiatric disturbance. Ten per cent of the patient group in this study were in their fifth year or over; the corresponding percentage for the total student body was identical. Thus, our findings showed no higher incidence of psychiatric disorder in students who were slow in finishing their graduate studies. When such a student had psychiatric needs, however, they were frequently related to his hesitancy to complete his studies.

We compared the number in the patient group who withdrew to the total number of withdrawals from the University. As might be expected, the patient group showed a higher percentage of withdrawals. Twelve per cent of the patients withdrew for "medical or personal reasons," compared to 4 per cent of the total student body. The 88 per cent of the patients who stayed in school are evidence

that the majority of those who have psychiatric need can continue their studies successfully when therapy is available. Psychiatric disturbance, however, is related to a higher proportion of withdrawals. This fact stresses further the importance of adequate therapy before severe incapacity appears. Occasionally, withdrawal from school is part of a successful response to therapy. Often, in such instances, the student's choice of graduate study was motivated by his psychiatric problems and was not in keeping with his abilities or interests.

Foreign students made up 14 per cent of the enrolment of this graduate school. All those classified as foreign students had spent what are considered the formative years in another country. Eighteen per cent of the group seen in psychiatric interviews were foreign students. The 4 per cent difference between the patient group and total enrolment does not have statistical significance. (A chi-square test was used to determine the level of significance of all the findings noted.) When the psychiatric needs of all foreign students of the University were reviewed, it was found that the percentage who came for psychiatric care was almost identical to that of the domestic students.

When psychiatric disturbance was related to the fact that the patient was a foreign student, the relationship was usually a superficial one, often limited to the way in which first symptoms were expressed. During the psychiatric interviews, the student quickly moved to the more basic difficulties that had their origin in an earlier period before the student left his home country. Most adjustments that foreign students must make are well known to counselors, faculty members, and administrators who are accustomed to dealing with students from other lands. Experienced staff members can usually help the student keep interference with study to a minimum. Adjustment problems often present themselves shortly after the student arrives in the new country. Concern and tension associated with the problems are usually appropriate and are relieved as the problem begins to be resolved or as the student learns the extent to which the problem can be remedied.

At times the large geographical areas of this country have medical

Boston University  
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Library

significance. Differences in the incidence of many diseases correspond to geographic regions. The areas also represent cultural differences, which, in a general way, are often reflected in the educational institutions of each area. An attempt was made to see whether these facts had significance for psychiatric need. The students from New England Colleges were compared to those from the West Coast. It was necessary to use large groups to give significance to the numbers involved. The findings showed no difference in incidence of psychiatric need in the two groups.

Sometime during the student's first four months at the University, he is given a complete medical evaluation by the Health Service. The evaluation includes a confidential medical history, and, for the most part, students are at ease in giving full information. A physical examination is given by an internist who takes enough time for thorough evaluation of any medical problems found. The information obtained from this evaluation was summarized for all students in the patient group and also for an equal number of students considered as controls. The latter group was picked at random from the total enrolment of the Graduate School of Arts and Sciences, excluding those who had received psychiatric assistance. The two groups were compared in areas that might relate to psychiatric need.

The medical evaluation includes much information on the student's general background. Drawing on this information, we compared areas of ethnic origin to consider further the possibility that cultural differences affect psychiatric need. We found that areas of origin of the patient group were directly proportional to those of the control group. In psychiatric therapy, the child's place in the family often has significance. A student's sibling relationships or the fact that he is an only child may have a bearing on his problems. The patient group and the control group were compared in these respects, and in all the findings related to sibling position there were no significant differences. When the histories of the students were reviewed, it was found that the two groups showed no significant difference connected with the occurrence of death of one or both parents, divorce or separa-

ration of the parents, or history of mental illness in parents or siblings or both.

The interruption of study for service in the armed forces is at times associated with psychiatric need. Some students described their military service as a maturing experience, while others considered it a delay or escape. An equal number in the patient and control groups gave a history of military experience, indicating that it is not related to incidence of psychiatric need.

During the medical evaluation, the student is asked about his career plans. Compared to the control group, a slightly higher percentage of the patient group had no career plans or indefinite plans. The two groups showed no difference in the number of students who had had a severe physical illness. Marriage and divorce were proportionate in both groups.

Several items in the medical evaluation deal more specifically with psychiatric need, and comparisons of the two groups in certain areas showed significant differences. Ten per cent of the patient group spontaneously requested psychiatric therapy at the time of their initial medical examination, as opposed to only 1 per cent of the control group. Forty-one per cent of the patient group expressed symptoms related to psychiatric disturbance as they answered questions in the medical history, compared to 9 per cent of the control group. The symptoms included in this category were only those directly related to psychiatric symptomatology, such as depression and anxiety. Symptoms of a somatic nature, having a possible relationship to psychiatric disorder, were not included. There was no significant difference in the number of patients and controls who gave a history of having had a mental illness.

The physician who conducts the physical examination evaluates the student's personality. This evaluation includes a rating on "social relations" and "basic personality integration." Twenty per cent of those who later came for psychotherapy were considered below average in this personality appraisal as opposed to 7 per cent of the control group.

The physician is also asked to give an estimate of the student's

future medical needs, including possible psychiatric need. In the patient group 20 per cent were thought to have definite need for psychiatric care, and 22 per cent were considered to have a questionable need. In the control group, psychotherapy seemed indicated for 2 per cent, and 3 per cent were estimated to have a questionable need.

In reviewing the initial medical evaluations, only the following, it was found, gave evidence of need for psychiatric care: spontaneous request for psychotherapy, expression of a symptom related to psychiatric disturbance, the physician's evaluation of the student's personality, and the physician's estimate that psychiatric care was clearly or questionably indicated. When all these factors were considered, 53 per cent of the patient group showed evidence of possible psychiatric need as opposed to 9 per cent of the control group.

Nothing in the information on a student's general background significantly predicts a need for psychiatric assistance. This finding was one of the most important in the study. If students qualify for admission to a graduate school, no information routinely requested identifies the majority of those who will need therapy.

Although far from conclusive, several findings indicated that cultural background has no significant bearing on the incidence of psychiatric disorder. The study strongly suggests that students from all cultures share similar psychiatric needs and that dynamic psychotherapy deals with material of enough basic importance to make interviews appropriate and beneficial regardless of the culture in which the student was reared.

The study indicated that a complete and competent medical evaluation after the student has begun his graduate study can have considerable value. The medical evaluation not only anticipates the psychiatric needs of a significant number of students but can also have value in helping them arrange for therapy with the least delay.

Compared with college students, the graduate shows a greater awareness of his needs. He usually seeks therapy on his own initiative,

and is less apt to involve the faculty or administration in his problems. The graduate student often comes to the psychiatrist highly motivated and has little resistance to therapy.

More than half of the students interviewed had little or no interference with their studies. This fact points to one advantage of having psychiatric care readily available in the university program; much can be gained if the student receives appropriate therapy before severe incapacity develops. More than two-thirds of the students who came for psychiatric help received important benefits from treatment. This finding points to the value of having the psychiatric staff offer more than diagnostic service, despite lack of time to give optimum therapy to all in need.

Most students were in an early stage of illness that is usually considered responsive to treatment; very few had an illness of such long standing as to be intractable. It is important that those who require prolonged and intensive therapy get help in obtaining treatment. The study revealed that a high percentage of those who required therapy beyond that available at the University had psychoneurotic symptoms. Compared with the College, the Graduate School had a higher incidence of this illness. This finding suggests that additional therapeutic hours should be available for graduate students.

Admission to a school of graduate study is evidence of considerable ability; most graduate schools require applicants to have completed undergraduate work at a high academic level. The future role of the graduate student emphasizes the need to administer graduate study in a way that encourages maturity and fosters "a growing self-dignity and ripe poise." Much can be done to encourage such growth by having psychiatric care readily available to students who have special need for greater self-understanding.

C. MABEL CLAPP

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## *Houston Challenges the Gifted History Student*

Houston high schools are meeting the problem and the promise of the gifted student with courses of unusual challenge and diversity. Some Houston schools are offering gifted students enriched courses in required subjects. Other schools are offering special electives. One elective in history proved an inspiration to teacher and students alike. A pioneering course, it was conducted without a syllabus, without textbooks, and with very few precedents to serve as guides.

What should gifted students in their last semester of senior high school gain from a half-year elective in advanced history? Several returns were agreed upon. Joy and satisfaction in studying history deeply and widely. Practice in writing term papers, complete with bibliographies and footnotes. A working knowledge of sources of historical information. Ease and independence in using such library aids as encyclopedias, card catalogues, and the *Reader's Guide to Periodical Literature*. And above all, an intense interest in history.

Those of us who planned the new course decided that it should not concentrate on any particular period. Rather, the new elective was to be a modified seminar. While plans for it were under discussion, the question of academic credit arose. Accrediting agencies had not approved a course designed for exceptional students. However, several college registrars did agree to grant credit for the new elective.

With this encouragement, we invited twenty-five seniors to enrol. Sixteen were finally admitted on the basis of their scholastic aptitude, their interest in history, and their marks in previous social-science courses.

The young historians worked on group projects, class projects, and individual research problems. The questions the students chose to study ranged across the centuries. One group delved into the causes of the French Revolution. Another, with unusual religious interests, became absorbed in the early spread of Christianity. All scholars scanned the news for questions to investigate. From the headlines came such lively subjects as the Suez Canal and statehood for Alaska and Hawaii.

For a time the students explored the subject of geography. "When we were in the elementary school," one of them said, "we studied the hot lands and the cold lands, but we still don't know enough about countries and places." Because nearly all the students were eager to round out their knowledge of place geography, the entire class worked on the project.

For a month, each student kept a record of all the geographical names he saw in the newspapers and in the news and business magazines. Several class sessions were devoted entirely to the study of the geographical dictionary, maps, atlases, and news periodicals. Students located each place that cropped up in their reading and linked the name to current events. The research taught students far more about world geography than the location of rivers, cities, mountains, countries, and seas.

The project stirred the students' curiosity. They were soon proposing that the class study the living geography of one country. For this project, the students chose the Soviet Union. How do people there make a living, the students wanted to know. What is the country like? What resources are available? Before the end of the semester the class found time for a brief study of Germany also, her late rise to the status of a leading power and her struggles as a contender for world domination.

During the course, each student worked on an individual project—usually a term theme. For several young researchers the choice of a topic proved a knotty but exciting problem. One student, who as a child had heard stories about a tunnel on her grandfather's farm in

Indiana, wrote about the Underground Railroad. Another student turned up a research problem quite unexpectedly. She was fingering her antique bracelet in class one day, when the teacher, noting the unusual piece, casually said: "Do you like antiques—old glass, old china?" The girl's eyes sparkled, and the teacher followed the lead: "I wonder how experts can tell whether a piece of glass in a shop is a priceless bit or a cheap bauble?" The girl had her topic. The paper she wrote on the American glass industry was one of the liveliest reports handed in. As the new expert on glass laid her completed report on the desk, she said to the teacher: "This could be the start of a new hobby."

To guide the young historians, research procedures were set up, procedures that could be used in both group projects and individual studies. As soon as a topic was chosen, the students went to the library to explore their subject. From time to time, as problems cropped up, the students returned to the classroom, singly or in groups, to talk over their questions. When the queries were cleared, the students went back to the library to resume study. When the researchers felt that they had enough information, they adjourned to the classroom to confer with the teacher before organizing their material and preparing an outline. This step completed, the researchers again settled down in the library, this time to master their subject and round off their report.

Teacher and librarians alike agreed that the students should be encouraged to develop independence and resourcefulness in library research. Consequently, the librarians gave the seminar students more freedom than was customary. Special orders were sent out for books that were not in the school library. The instructor worked hard to keep ahead of the questions and to suggest reference materials. But before long the students themselves became expert at trailing sources. Several researchers went to the library of the Rice Institute for books. When the class was working on the special study of Germany, researchers discovered that the school library had only a few publica-

tions on that country. The students lost no time in scouting elsewhere for information, and their resourcefulness was equal to the test. To prove their prowess, they escorted their teacher to a branch of the public library, where they pointed out their valuable find on Germany.

Whenever a group of students announced that a report was ready, the class met to hear the findings. The students' standards were high. They were satisfied only with thorough studies. Researchers could expect probing questions from the floor, and the questions might be raised in the middle of a report as well as at the end. The enthusiasm of the class caught fire at the slightest challenge. Doubtful statements were queried, whether they were made by classmates or the teacher. Everyone wanted to join in every discussion. The session on statehood for Hawaii and Alaska was one of the liveliest of all.

At the end of the semester, each student submitted an unsigned evaluation of the course. All agreed that they had done more work in the seminar than in any other social-science course, and they had found the work more enjoyable. Students relished the challenge of associating with only superior classmates. They reported a keener interest in biographies and news magazines and more self-reliance in using libraries. It was a source of satisfaction, the students said, to have a fund of knowledge on a variety of topics. Altogether, the course had been stimulating and unquestionably worth the time and effort they had invested. Above all, for these high-school seniors, the end of the seminar did not mark the end of the study of history. For them, history had a future. The seminar over, they were looking forward with new confidence and new interest to history classes in college.

## *Book Reviews*

*The Challenge of Soviet Education* by GEORGE S. COUNTS. New York 36: McGraw-Hill Book Company, 1957. Pp. xii+332. \$6.00.

Three kinds of books are available to the English-reading individual who wants an adequate perspective on Soviet education. One type of book presents detailed statistics on enrolments and copies of curriculums and examinations. The widely used manuals by DeWitt and Korol belong to this group. At the other extreme are expositions of the workings of the Soviet government, analyses of the economy, or studies of the status and control systems in Soviet society. These books examine the latent and manifest functions of the educational system and illuminate the ideology pervading education and other sectors of Soviet life. Berman, Bauer, Towster, and Schwartz are familiar authors in this category.

This volume by Professor Counts exemplifies a third, somewhat hybrid, approach. The reader will not find statistical data here. Nor should one expect Counts to give a rounded interpretation of the role of schools in the political process, though he discusses the training of the Party elite and the retraining of criminals. Counts does not write as an educator, nor is he sociologist or political scientist. He stands here as a warmly interested, scrupulous essayist and scholar who has had to make drastic revisions of his earlier judgments. In this role he provides a unique and informative book. On some topics, anyone who is widely read will learn little. On other topics Counts offers an abundance of information that is barely alluded to in other standard works. This is the only book, perhaps, that supplies a survey of all types of education, extramural as well as formal, though the quality of the chapters is uneven.

Most serviceable, because of the neglect of other educational writers, is the author's painstaking attention to political education. He describes in detail the operations of Communist youth organizations and the agencies of indoctrination directed toward adult citizens. Particularly interesting is his presentation of the programs of moral education that play an important role in providing both stable and dynamic elements in Soviet society. Moral education stresses nationalism, materialist philosophy in literature or art, and responsibility for one's actions. But in "cultured" conduct, schooling, and the striving for a better place on the social ladder the stress is on individuated behavior. It is useful also to follow the ambitious programs for dealing with criminals and for exploiting military service for doctrinal and educational ends.

Counts traces changes in policies and operations at different periods

of Soviet history. On several topics, he also supplies a brief chronicle of tsarist precedents. He gives considerable attention to inconsistencies, to clashes between the real and the ideal, and to the emergence of new policies.

The broad survey of formal education, including the conspicuous vocational program, will be of little use to readers who have read the books of DeWitt and Korol. The training of the elite, both political and intellectual, is dealt with more adequately. However, as Sputnik and Pasternak signify, the operations of a centralized, totalitarian society are more complex and more subtle than Americans find it congenial to believe. Counts suggests some of the crosscurrents in this area, but the deeper forces are barely perceptible here.

The aspects of Soviet society most neglected by writers are not strictly Soviet but tsarist in tradition. Vocationalism, politico-moral indoctrination and control, recruitment of people from lower strata into universities, extensive use of stipends, high academic standards in universities—these and many other phases of Soviet life are rooted in tsarist traditions and policies. In many respects, Soviet Russia becomes less Bolshevik and more Russian every year.

Counts is singularly instructive on one phase of this background. Few of us make the effort to locate books on social movements in nineteenth-century Russia, on contending philosophical schools, and on the non-Marxian roots of bolshevism. Yet in these influences lie the roots of major themes in contemporary Soviet life. One cannot jump from Marx's writings to Leninist revolutionary strategy to industrialization in an underdeveloped country. These developments were remolded as they impinged on the Russian milieu. To inquire beyond the author's history of these tsarist intellectual currents will reward anyone who seeks a deep understanding of Soviet education.

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*Who Runs Our Schools?* by NEAL GROSS. New York 16: John Wiley & Sons, 1958. Pp. xvi+196. \$4.75.

This book is a publication of the Harvard School Executive Studies. Written for lay citizens and educators, it offers a familiar but frightening commentary on how a representative sample of public school executives and their lay boards of education feel about their work. The volume deserves careful study for good reason: the book is based on extensive

confidential interviews with half of the Massachusetts school superintendents and their board members; the data were carefully quantified by appropriate statistical measures; and the results point up sharply how the reality of public education, at least in Massachusetts, differs from the idealized portrait often drawn in textbooks on education.

One of the most serious problems facing the public schools in many communities may be the irresponsibility or ineffectiveness of the school boards. For Gross, this problem is the central issue (p. 136). Twenty-six per cent of the board members interviewed singled out the functioning of the school board as a major source of dissatisfaction; 18 per cent of the superintendents mentioned the school board as one of their major problems, while 27 per cent of the superintendents reported that their community was indifferent or hostile to the school board.

Why do people want to be school-board members? Considering the purpose of the inquiry, the question is seminal. Gross asked it by using a check list on which the superintendents designated good or bad motives for each board member. The investigator felt that the superintendent's judgment was more objective than the board members' simply because he was describing the motives of other individuals. The superintendent, the investigator believed, could reasonably infer motives from what the board members did after they were elected (p. 75). Gross's technique could be questioned. It seems unlikely that board members as a group are so unsophisticated as to bare their souls before their subordinate, the superintendent. Even if they did so, the ability of a school superintendent to sift fact from fancy in such a situation might well be questioned.

A good motivation was defined as one likely to lead to behavior that would contribute to the best interest of the schools and all the children in the community (p. 76). School-board members with good motivation were those who, according to their superintendent, were motivated by civic duty; members with bad motivation were those who, according to their superintendent, were motivated by the intent to represent some group or the desire to gain political experience. Other reasons for seeking election—and there were many—were discarded because it was not clear that they qualified as "good" motives. Differences in occupation, sex, education, and marital status were not statistically significant in distinguishing between good motives and bad. Age, religion, length of service on the board, satisfaction with the job, size of system, and type of community did make a difference. It made a difference, too, whether

the board members had children; whether they sent their children to private schools.

How do motives affect the operation of a school board? To answer this question, Gross designed an instrument to distinguish among school boards according to their conformity to professional standards. These standards consisted of twelve school-board practices deemed representative of good administration. The list included such items as "taking full responsibility for decisions" and "appointing only teachers nominated by the superintendent." Findings indicated that the greater the proportion of members motivated by civic duty, the more the board adhered to professional standards.

Note that each of the measures—motives and conformity to professional standards—is based on the superintendent's rating. The two ratings are hardly independent; it seems inconceivable that a superintendent would designate a board member as badly motivated and also rate him high in professional standards. Conversely, it is unlikely that a superintendent would designate a board member as well motivated and then rate him low in professional standards. These measures clearly represent a single appraisal: they are a sort of global rating the superintendent has for each board member.

Superintendents themselves did not escape unscathed. Only 51 per cent of the board members gave their superintendent an over-all rating of "excellent" in job performance. In the area of public relations, this rating was reduced to 40 per cent, and in the realm of instructional direction only 46 per cent of the superintendents received a mark of "excellent." Finance, personnel administration, and plant planning and management were the areas where superintendents were considered most effective.

Like most investigators of state school problems, Gross found that lack of money was the most pervasive difficulty that Massachusetts school districts faced. Sixty-eight per cent of the school superintendents reported inadequate finance as their chief obstacle in establishing a good educational program. Individuals interested in a low tax rate were often regarded as enemies of the school by the superintendents and board members.

Regrettably, the study suffers at times from an extreme reliance on quantitative statistical tests. We learn, for example, that there is a link between community support of the Community Chest and the professional standards of the school board. The community that, in the superintendent's opinion, gives strong support to the Community Chest is

likely to have a school board that behaves professionally. In localities where support for Community Chest is weak, the school board is likely to do a poor or mediocre job (p. 97). What does the finding mean to an aspiring school superintendent? If he interprets literally, he will check on local support for the Community Chest before accepting an appointment.

Religion is another area that is obscured under this type of treatment. Only 27 per cent of the Catholic board members, who represent nearly two-fifths of the total sample, have good motivation, according to the superintendents. Why are Catholic board members said to be badly motivated? Is it because they represent the Catholic bloc? Does their affiliation by definition categorize them as deviant motivated? Or are more subtle reasons at work? A content analysis of the interview protocols of Catholic board members might be revealing.

The wealth of data collected by Gross and his associates must contain unusually rich content. Treated qualitatively, it should yield more salient dimensions and give useful insights as to what comparisons are worthwhile. When empirical studies of this type are published for the general public, they need to be analyzed in terms that are meaningful to the layman.

Gross is a sociologist, not a professor of educational administration. Nowhere is this fact more evident than in the final chapter. His suggestions for improvement include such familiar bromides as written policies for school boards, public opinion polls, citizens advisory committees, realistic training in schools of education, expanded field services by colleges and universities, the use of the caucus in selecting board members, and state legislation that forbids malpractice by school-board members. These are worthy proposals, which will not come as heresy to the practitioner who has been trying to implement them for years.

This study is not characterized by matchless clarity and startling ideas. Written in the ponderous style of a social science monograph, the book sacrifices narrative precision for tedious and repetitive detail. Although it is easy to quarrel with the methodology used, the book is still significant, because it provides an excellent empirical base for the further study of relations between school boards and superintendents.

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## *The Sniper's Nest*

### BRIGHTENING THE COSMOS

More years ago than I like to recall, we used to sing in Sunday School, "Brighten the Corner Where You Are." This children's favorite carried the ethical message that was current in American society at that time. Each person's moral duty lay in doing the best he could within the sphere in which he found himself. This view was the ethical equivalent of Adam Smith's economic doctrine that, if each individual sought his personal profit, society as a whole would profit. The ethical doctrine taught that, if each one did his bit within his own lot in life, the total society would be good and moral.

The ethical view had the same limitations as its economic counterpart. The belief easily led to an almost exclusive emphasis on family and neighbors while one let the rest of the world go hang. Depression, migration, and world conflict soon made evident the dangers of a narrow area of concern. As a result, the pendulum swung to the other extreme. Now everyone feels that, if "the good will is to shine like a jewel in its own light," its foot-candles must be considerably increased. Everyone wants to brighten the cosmos.

This larger view too has its limitations. For example, some of my neighbors who are extremely eager workers for world peace and world federation are remiss in shoveling their sidewalks. They would no doubt argue that a few broken legs or contusions in Chicago are a slight price to pay for world peace. True enough, but, while it clearly lies within their power to prevent the local mishaps, one wonders how effective their efforts on the international scene will be. Similarly, one of my friends binds up the world's wounds both personally and professionally. She ministers to her waifs and strays only at the cost of neglecting her family, who feel more than a little bitter about the situation. Here again, attention to the need at hand might well have more long-term effect than more sweeping but more attenuated efforts on a larger scale.

Whatever one may think of this turning away from the local toward the cosmic, this change in emphasis has probably had more influence on the recruitment of teachers than is usually noted. The opportunity to have an immediate and direct effect on even a relatively few students has certainly been one of the traditional attractions of the profession. The teacher has felt that, within an admittedly narrow sphere, he could have considerable influence. The popularity of the larger area of activity has clearly made teaching less attractive. The teacher who comes in contact with fifty to a

hundred students a year for forty years has a limited audience compared to the audience commanded by a television performer in one hour. Here is one reason why we lose people from the profession and fail to recruit enough of the right ones into it.

Certainly, many things in recent years have reduced the attractiveness of teaching as a profession. Some of these, such as the inadequate pay, are being remedied. But until we restore some feeling that human effort for good—even on a limited, local scale—is worthwhile, much of the joy of teaching will be lost. Many will be unwilling to brighten merely a corner with a pedagogical candle when they feel they can get a searchlight in some other profession.

#### IMPRESSIVE

No word is heard more often in academic circles these days than is *impressive*. Let a well-known name turn up in conversation or discussion, and someone is almost certain to confer the accolade of this adjective upon the person mentioned. The word is bandied about so much that it never occurs to anyone to ask, "Impressive in what way?" Obviously, the word *impressive* by itself carries the whole meaning.

But this meaning is actually more limited than one might suppose. When explanations follow, they are glosses: "He looks imposing," "He handles himself well," "He has a nice manner," "He speaks well," "He is clean-cut." In short, this omnipresent adjective is the official stamp of approval bestowed on the marketable personality in a culture where other-directedness is dominant. I have not recently heard the epithet used to describe anyone who was impressive in learning, in skill, or in integrity, qualities now generally a drug on the market.

The ubiquity of this word even within ivy-covered walls might not be surprising, were it not for the fact that universities and colleges have prided themselves on being pockets of resistance against the forces of conformity. The intellectuals have dared to assert that familial bliss was possible in something besides a split-level house with a picture window opening on two patios. They have alleged that the height of the tail fins should not be the dominant criterion in purchasing a car. More relevant to our present concerns, spokesmen from university campuses have been loud in their assertions that schoolmen and "educationalists" in general have forgotten all the criteria of the good life except "being well liked." They have been free with their charges that educators thus befuddled have been leading the children of America into a like plight.

Intellectuals, both on and off college campuses, were the first to attack the shallowness of "What will people think?" as a standard of character and conduct when this judgment was based on the mores of Main Street. But they are apparently becoming as bemused as everyone else when the standards are those of Madison Avenue. There has been some hope that perhaps someone would rescue society from itself and suggest a sounder standard than the prestige of appearance. There have even been signs that society itself would like to be saved. But the heroes in this rescue, if they come, will obviously not descend from the ivory tower. There is no one up there. They are all out being impressive.

HAROLD B. DUNKEL

*University of Chicago*

## *Summer Conferences and Workshops at the University of Chicago*

### CONFERENCE ON READING

The Twenty-second Annual Reading Conference will be held from Monday, June 29, through Thursday, July 2. The central theme of the Conference is "Reading Instruction Adjusted to Varying Patterns of Grouping." Attention will be focused on aspects of reading instruction that are common to various patterns of grouping as well as aspects that are unique to each pattern.

As a background for discussion, the first day will be devoted to describing, in specific terms, the types of pupil behavior sought by teachers. During the half-day sessions that follow, participants will consider the advantages and disadvantages of heterogeneous and homogeneous groups; of special reading groups that cut across grade lines in contrast to self-contained classes; of teaching the entire group as opposed to subdividing within classes; and of individualized instruction in reading. The merits and problems posed by each pattern of grouping will be appraised in relation to the development of the behaviors described at the first session.

Methods of teaching will be appraised to determine their values and limitations for use with different patterns of grouping. Discussions will cover both the reading period and the reading in content areas. Materials appropriate to each pattern of grouping will be examined in relation to teaching methods for achieving the behavior changes identified.

Sectional meetings are planned after the general sessions for teachers in primary grades, middle grades, junior and senior high school, and junior college. One special section will serve administrators, supervisors, and reading consultants; a second section will be set up for teachers of corrective and remedial reading at all levels.

The conference will be held in Mandel Hall and adjacent conference rooms. It is open without fee to students registered for the summer quarter. For all others, the fee will be \$10.00 for the entire conference, \$3.00 for one day, or \$1.50 for one session. Copies of the preliminary program and information on board and room will be available about May 1 from Mrs. Helen M. Robinson, Department of Education, 5835 Kimbark Avenue, Chicago 37, Illinois.

## CONFERENCE ON LIBRARY SERVICE

The University of Chicago Graduate Library School will hold its twenty-fourth annual conference August 10-12. The theme chosen for the conference is "New Definitions of School Library Service." Outstanding authorities in school administration and teaching, as well as distinguished leaders in the library field, will discuss changing objectives in education and their implications for school library service. Special consideration will be given to the new standards for school libraries drawn up by a committee representing the American Association of School Librarians and representatives of other educational agencies.

For more information, write the director of the conference, Sara I. Fenwick, assistant professor in the Graduate Library School, University of Chicago.

## WORKSHOP IN ELEMENTARY EDUCATION

The 1959 Summer Workshop in Elementary Education will begin on Monday, June 29, and conclude on Friday, July 17. The workshop will focus on classroom organization within individual classrooms and from class to class. Special attention will be given to the non-graded school and to team teaching as devices for level-to-level and class-to-class grouping of pupils and teachers. During workshop sessions, such issues as the following will be considered: promotion and non-promotion, homogeneous and heterogeneous grouping, departmentalization and the self-contained classroom. The curriculum and home-school relations (including reporting to parents) will be discussed in relation to reorganization of the elementary school.

The workshop is appropriate for administrators, supervisors, and teachers. A special invitation is extended to school faculties that wish to attend as a group. Workshop personnel will consider plans for changing classroom organization in schools and school systems.

In addition to the workshop staff, resource persons from the University of Chicago, other universities, and selected school systems will be available.

Credit in the amount of one course (three and a third semester hours) may be earned for the three-week period. Additional information and advance registration blanks may be obtained from Professor John I. Goodlad, director, Center for Teacher Education, University of Chicago, 5835 Kimbark Avenue, Chicago 37, Illinois.

#### WORKSHOP IN READING

The Seventh Annual Workshop in Reading is scheduled to begin on July 6 and continue through July 31. The workshop is open to classroom teachers from primary grades through junior college, reading consultants, supervisors, administrators, librarians, and remedial teachers. The topics taken up in the general and sectional meetings will be based on the problems listed by participants on application blanks. The program includes lectures, demonstrations, observations of testing and teaching procedures, and discussions of common problems. The following will serve on the staff: Mary C. Austin, Elizabeth Graf, Mildred C. Letton, James M. McCallister, William S. Gray, and Helen M. Robinson.

The workshop offers one and a half course credits (five semester hours). Applications should be filed in advance. Additional information and application blanks may be secured by writing to Mrs. Helen M. Robinson, Department of Education, 5835 Kimbark Avenue, Chicago 37, Illinois.

#### WORKSHOP IN LANGUAGE ARTS

The Fourth Annual Workshop in Language Arts will be held during a three-week period (August 3-21), following the Workshop in Reading. The workshop is open to classroom teachers, supervisors, and administrators. The general theme chosen for the workshop is "Developing Writing Abilities." Participants will consider skills, methods, and materials for developing writing abilities, as well as ways of evaluating pupils' growth in this area.

While much of the emphasis will be at the elementary level, participants will have opportunities to explore the writing problems of high-school and college students. Members of the workshop will also have a chance to work on curriculum and instructional problems in this field as they may be related to their own teaching situations.

The workshop offers one course credit (three and a third semester hours). Application forms for admission to the workshop and additional information may be obtained from Miss Mildred C. Letton, Department of Education, 5835 Kimbark Avenue, Chicago 37, Illinois.

## *From the Publishers*

- ADLER, ALFRED. *The Education of the Individual*. New York 16: Philosophical Library, 1958. Pp. 144. \$3.50.
- BLOCH, HERBERT A., and NIEDERHOFFER, ARTHUR. *The Gang: A Study in Adolescent Behavior*. New York 16: Philosophical Library, 1958. Pp. xviii+232. \$6.00.
- CAMPBELL, ROALD F., and OTHERS. *Introduction to Educational Administration*. Boston 8: Allyn & Bacon, 1958. Pp. xviii+434. \$6.00.
- CAPLOW, THEODORE, and MCGEE, REECE J. *The Academic Marketplace*. New York 3: Basic Books, 1958. Pp. x+262. \$4.95.
- COUNTS, GEORGE S. *The Challenge of Soviet Education*. New York 36: McGraw-Hill Book Co., 1957. Pp. xii+332. \$6.00.
- Education of Exceptional Children and Youth*. Edited by WILLIAM M. CRUICKSHANK and G. ORVILLE JOHNSON. Englewood Cliffs, New Jersey: Prentice-Hall, 1958. Pp. xiv+724. \$6.95.
- GIBBS, EVELYN. *The Teaching of Art in Schools: An Illustrated Description of Children's Imaginative Painting and Its Effect on Craft*. New York 3: John De Graff Inc., 1958. Pp. 128. \$5.00.
- GROSS, NEAL. *Who Runs Our Schools?* New York 16: John Wiley & Sons, 1958. Pp. xvi+196. \$4.75.
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- HUTSON, PERCIVAL W. *The Guidance Function in Education*. New York 1: Appleton-Century-Crofts, 1958. Pp. viii+680. \$6.00.
- KEARNEY, NOLAN C. *A Teacher's Professional Guide*. Englewood Cliffs, New Jersey: Prentice-Hall, 1958. Pp. x+358.
- KELIHER, ALICE. *Talks with Teachers*. Darien, Connecticut: Educational Publishing Corporation (23 Leroy Avenue), 1958. Pp. 148. \$2.95.
- KNELLER, GEORGE F. *Existentialism and Education*. New York 16: Philosophical Library, 1958. Pp. xvi+170. \$3.75.
- KUBIE, LAWRENCE S., M.D. *Neurotic Distortion of the Creative Process*. Porter Lectures, Series 22. Lawrence: University of Kansas Press, 1958. Pp. vii+152. \$3.00.
- MAGNIFICO, L. X. *Education for the Exceptional Child*. New York 3: Longmans, Green & Co., 1958. Pp. xii+372.
- MILLER, VAN, and SPALDING, WILLARD B. *The Public Administration of American Schools*. Yonkers 5, New York: World Book Co., 1958 (second edition). Pp. xvi+606.
- PRESCOTT, DANIEL A. *Factors That Influence Learning*. Horace Mann Lecture, 1958. Pittsburgh 13: University of Pittsburgh Press, 1958. Pp. 78. \$1.00.
- SECHREST, CAROLYN A. *New Dimensions in Counseling Students: A Case Approach*. New York 27: Bureau of Publications, Teachers College, Columbia University, 1958. Pp. viii+120. \$3.00.
- TERMAN, SIBYL, and WALCUTT, CHARLES CHILD. *Reading: Chaos and Cure*. New York 36: McGraw-Hill Book Co., 1958. Pp. xiv+286. \$4.75.

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